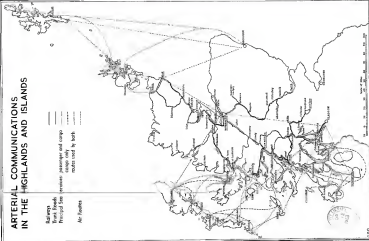


ARTERIAL COMMUNICATIONS IN THE HIGHLANDS AND ISLANDS

- Railways
- Ferry, Road
- Principal Sea
- Services: passenger and cargo
- cargo only
- routes used by both
- Air Routes



PART I INTRODUCTORY

Origins of the Enquiry

1. In June, 1959, the Scottish Transport Council and the Advisory Panel on the Highlands and Islands were invited by the Minister of Transport and Civil Aviation on behalf of himself and the Secretary of State for Scotland to co-operate in a study of existing transport services in the Highlands and Islands; the consequences of competition between sea and air, rail and road, and probable trends in the development of and the demands for, different means of transport; and the possible methods of securing adequate facilities in future, regard being paid to the need to avoid unnecessary duplication of unremunerative services.

Membership

2. Membership of the Enquiry has comprised two representatives of the Scottish Transport Council and two of the Advisory Panel on the Highlands and Islands in addition to the Chairmen of both bodies who have acted as Joint Chairmen of the Enquiry. The Enquiry has been assisted by a Working Party of representatives of the operators of nationalised or Government assisted transport services in the area (British Railways, the Scottish Bus Group, British Road Services, British European Airways and David MacBrayne Ltd.) and of Departments concerned with Highland affairs and the various aspects of Scottish transport (the Department of Agriculture and Fisheries for Scotland, the Scottish Development Department, the Ministry of Aviation and the Ministry of Power). The Secretaries of the Scottish Transport Council and the Highlands Panel have acted as Joint Secretaries to the Enquiry. The views expressed in this report are of course the views of the members of the Enquiry alone. The membership of the Enquiry and of the Working Party are given in Appendix 1.

Scope of this Report

3. Earlier in 1961 we submitted to the Minister of Transport a report on bus services in the Highlands and Islands in order that our views on this aspect of Highland transport might be made known at the same time as the Committee on Rural Bus Services in the United Kingdom reported, and this was published in December, 1961.* This present report on communications by rail, road, air and sea represents the major part of our work and deals with arterial transport in the Highlands and Islands. The Government's proposals for the reorganisation of the nationalised transport undertakings, especially the railways, which were the subject of a White Paper, (Cmnd. 1248, December, 1960), and have subsequently been developed in the Transport Act which has just become law; their views on the financial and economic obligations of the nationalised industries (Cmnd. 1337, April, 1961) and on civil aerodromes and air navigational services (Cmnd. 1457, August, 1961) have greatly changed the background against which the problems of Highland transport have to be considered and the submission of this

*Report of the Highland Transport Enquiry on Bus Services in the Highlands and Islands, Ministry of Transport, 1961.

report has inevitably been delayed. We are aware too that as regards the railways, the results of the studies at present being carried out by the British Transport Commission on the traffics carried by and the economics of individual lines will shortly be available.

4. The devising of a Highland transport plan has been the aim of many since Scottish minds began to apply themselves to the proper development of the North and West nearly 200 years ago, but it is salutary to recall how plans have changed with the years. The late 18th and early 19th centuries believed that canals at Crinan and along the Great Glen would facilitate the answer to the transport requirements of the Highlands and Islands. The Statistical Account of Scotland of 1792 even suggested a canal joining north-east and north-west coasts via the lochs of central Sutherland and a canal joining the Great Glen to the west coast through Moidart. Sir Walter Scott in 1828 could express the hope that 'the late introduction of steam navigation, by facilitating the communications with the best markets, presents an important stimulus to the encouragement of industry, in a country almost everywhere indented by creeks and salt water lakes, suitable to the access of steam vessels'. Then came the railway era and the canals and coastal shipping to the Highlands alike both began to lose importance; and in their turn the Highland railway lines were considered to be an enduring answer to the transport problem of the area. But any expectation that the 'problem' of Highland transport could be solved once and for all was to prove illusory. As late as 1920 a Government Committee on Transport in Rural Scotland—with the advent of road transport just over the horizon—could recommend that the solution to the difficulties of Highland transport lay in the construction of a suitable number of light railways on the mainland and in some of the larger islands. On the advice then available to them it seemed to the Committee that roads and vehicular traffic could never meet the transport requirements of any part of the Highlands. We may justifiably be diffident about propounding any hard and fast solution to the problem.

5. The arrangement of this report is as follows: first we describe the existing arterial transport services of the area by rail, road, air and sea, and we include a description of the trunk roads. Next we describe trends of traffic so far as they can be ascertained and the various measures of modernisation and improvement recently completed, in hand or projected; this includes information about trunk road improvement. Then we examine the financial aspects. Lastly we consider how adequate facilities might be secured in future.

6. In our first report we referred to the assistance given us by the review of bus services in the mainland Highlands and Hebrides compiled by Dr. W. I. Skewis*. This study of bus services was part of a major review of transport operation in this area. At our request Dr. Skewis also gave us advance copies of this work; and we would like to record our high opinion of Dr. Skewis's work and of its value to us.

7. The invitation to the Scottish Transport Council and the Highlands Panel to undertake this present enquiry was conveyed in 1959 by the then Parliamentary Secretary to the Ministry of Transport and Civil Aviation. Since then civil aviation has become the responsibility of a separate department; and so we

*Transport in the Highlands and Islands. W. Iain Skewis, B.Sc., Ph.D., Glasgow University, 1962.

address our report to the Minister of Aviation as well as to the Minister of Transport and the Secretary of State for Scotland.

PART II EXISTING TRANSPORT SERVICES

8. This section deals with the salient features of rail services, roads and roads services, shipping services and air services. Statistical information is given in the Appendices.

RAIL SERVICES

9. The Highland railway system is in two parts. The main part consists of a spine running from central Scotland by Perth over the Grampians to Inverness and northwards from there to Wick and Thurso. From this spine, lines run to Oban and Ballachulish on the west coast from Dunblane, up Speyside from Aviemore to the Moray Firth coast and from Dingwall to the north west coast at Kyle of Lochalsh. At Inverness there is rail connection eastwards to Aberdeen. The second part of the Highland system is the line from Glasgow to Fort William and onwards to Mallaig on the west coast. The freight carryings of these lines are given in Appendix II. The total passenger carryings are not available to us, though British Railways have given us figures of passengers booked at stations on the Highland lines. We refer to this in paragraph 61.

Perth-Inverness

10. *General Description.* The railway from Perth to Inverness is 118 miles in length and, after it leaves the Perth-Aberdeen route at Stanley Junction, for the greater part is single track. At Ballinluig, 24 miles north of Perth, a branch line 9 miles in length runs west to Aberfeldy. North of Pitlochry the line climbs through the Grampians, the highest point reached being Drumochter, 1,484 feet above sea level; and north of Aviemore there is a sharp incline to Slochd summit, 1,315 feet above sea level.

11. At Aviemore, 84 miles north of Perth, an alternative and longer route to Inverness via Forres commences; this 60 mile line is almost all single track and carries trains for the Speyside line to Craigellachie over its first five miles from Aviemore, and Aberdeen to Inverness trains on the Forres to Inverness stretch.

12. *Carryings.* The freight carryings of the Perth to Inverness line approach half a million tons; about a third of this is coal and a little less than a third is general merchandise. 1,330,000 parcels and 1,600,000 bags of mail are carried annually. There is a considerable livestock traffic, which is of course acutely seasonal. Twice as much of this originates from the stations north of Inverness serving the sheep and cattle rearing areas of Ross-shire, Sutherland and Caithness, as from the stations of the Perth-Inverness line. Passenger traffic in the summer is estimated to be nearly double the average winter carryings, but these summer figures include several sharp peaks of traffic when the 5,130 seats per day provided on all trains are fully taken up. The railway also provides for the needs of the travelling public by restaurant or buffet cars on the main trains;

by sleeping berths on night trains between Inverness and London, Glasgow and Edinburgh; and by a motor car sleeper service, three days a week in summer between Inverness and Newcastle, York and Sutton Coldfield.

13. *Winter operation.* The two summits of the line are subject to severe winter weather, but rail services are interrupted only rarely and then not for long.

The Inverness-Wick/Thurso railway

14. *General Description.* This line is 161 miles long and is single track. North of Helmsdale, the line runs between mountains and high lying moorland. Through railheads at Muir of Ord, Fearn, Bonarbridge, Lairg, Kinbrace, Wick and Thurso the line serves Caithness, Sutherland and the eastern seaboard of Ross and Cromarty. Railway lorries based at these railheads play a part in this. Services to Thurso fit in with the daily sailings of the mailship of the North of Scotland, Orkney and Shetland Shipping Company between Scrabster and Stromness in Orkney.

15. *Carryings.* The freight carryings of about 170,000 tons per annum are made up, to more than a third, of coal and, also to more than a third, of general merchandise, including agricultural requisites. Half a million parcels and half a million bags of mail are carried annually. The railway conveyance of the seasonal livestock traffic from the Northern Highlands has already been mentioned in connection with the Perth-Inverness line. The August peak of this traffic coincides with the apex of the summer passenger traffic. Passenger traffic again increases more than twofold in the summer months, with sharp peaks in these summer carryings when the 926 seats per day provided on all trains are fully taken up. Restaurant or buffet cars are provided on most through trains.

16. *Winter operation.* During the winter, severe weather—even blizzards—may be encountered around Lairg and on the inland sweep of the line between Helmsdale and Wick, but at the worst rail services are only interrupted for up to half a day.

The Dingwall-Kyle of Lochalsh railway

17. *General Description.* From Dingwall, 19 miles distant from Inverness, this line runs to the west for 63 miles through Ross-shire to Kyle of Lochalsh. It is single track, and west of Garve it runs through mountainous country. Garve, Achnasheen and Strathcarron stations are railheads for the small communities on the west coast of the country at Ullapool, Gairloch and the shore of Loch Torridon. In addition to serving the greater part of mainland Ross-shire, this rail route connects Aberdeen and the Moray Firth with the West Coast and the Hebrides. In particular it links the county town of Dingwall with Lewis. The railhead at Kyle serves Skye through the vehicle ferry service operated across the narrows by the B.T.C. owned Caledonian Steam Packet Company. There are daily steamer services from the railway owned pier by Messrs. MacBrayne's ships to Stornoway in Lewis, Portree in Skye, Raasay, Applecross and Mallaig; also a thrice weekly steamer service to Harris and the Uists.

18. *Carryings.* Annual freight carryings of the line are small—under 4,000 tons of coal, just over 3,000 tons of timber and 10,000 tons of general merchandise. 70,000 head of livestock are carried annually but this is not so abrupt a seasonal traffic as the carryings of the lines already described since a good deal of it is

daily livestock traffic to Stornoway for slaughtering there. Over 300,000 gallons of milk are transported annually for shipment to Stornoway, in daily consignments, which fluctuate considerably on account of seasonal and other factors. This line also carries 330,000 parcels and 310,000 bags of mail per annum. Average passenger carryings in summer are estimated to be more than twice the average carryings of the winter months and show sharp peaks of traffic when the 770 seats provided on the two main passenger trains each day are fully taken up. A restaurant car is provided on the two main passenger trains each day. The observation car which is provided in summer is normally fully booked.

19. *Winter operation.* In winter, central Ross-shire is liable to have heavy falls of snow, but generally rail services are not interrupted.

The Dunblane-Oban/Balachulish railway

20. *General Description.* From Dunblane, the point at which this single track railway leaves the Glasgow (Buchanan Street)-Stirling-Perth main line, it runs north and west 82 miles to Oban. After its first 11 miles to Callander, the line runs through mountainous country all the way to its destination. At Killin Junction, a further twenty miles on, a branch line runs 4 miles to Killin Village at the west end of Loch Tay. At Crianlarich, near the Perthshire-Argyll border this line crosses the Glasgow-Fort William line (described later). At Connel, six miles from Oban, a branch line crosses the narrows where Loch Etive joins Loch Linnhe by the railway-owned rail/road bridge and runs northward 28 miles through Appin to Balachulish. Oban is the port for Messrs. MacBrayne's mail-ships to Mull, Coll, Tiree, Barra, and South Uist and for the Company's main summer tourist services.

21. *Carryings.* Of the annual freight traffic of nearly 90,000 tons, about a third consists of coal and coke, about a quarter of general merchandise, about a fifth of alumina (conveyed to Balachulish from Burntisland in bulk alumina vans provided by the railway) for the aluminium works at Kinlochleven. There is also a considerable tonnage of oil carried. Livestock traffic, mostly of island stock passing through the Oban market, is considerable and seasonal. 160,000 parcels and 200,000 bags of mail are carried each year. Passenger traffic in the summer months again more than doubles the average of passenger traffic in the winter months and there are sharp peaks of summer traffic when the 7,470 seats provided on all trains each day are fully taken up. Restaurant cars run daily throughout the year. Sleeping cars operate between Oban and London. In the summer, observation cars operate between Oban and Glasgow.

The Craigendoran-Fort William-Mallaig railway

22. *General Description.* Glasgow (Queen Street) is the starting point and destination of passenger trains on this line but the line itself begins at Craigendoran Junction where it leaves the Glasgow-Helensburgh line. From Craigendoran all the way to Fort William, a distance of 100 miles, this single track line runs through mountainous or moorland country. At Crianlarich it crosses the Dunblane-Oban line and from there on the line is the only public transport link for a number of remote communities. From Fort William the line runs westward 42 miles to Mallaig. Messrs. MacBrayne operate a motor launch service on Loch Shiel between Moidart and Glenfinnan, at which there is a station on the West

Highland line. Mallaig Harbour which was built for the railway is the connection with Messrs. MacBrayne's steamers to Skye and the Outer Hebrides.

23. *Carryings.* Freight traffic is considerable (193,000 tons) and like the other Highland railway lines, coal and general merchandise are main components of the freight carryings. But this line has also an important industrial traffic, in connection with the factories of the British Aluminium Company at Fort William. Like the Oban line it carries a considerable tonnage of oil and spirit. Livestock carryings (26,000 a year) are much less than on the other Highland lines but the railway plays an important part in the conveyance of fish from Mallaig. 100,000 parcels and 100,000 bags of mail are carried each year on the West Highland Railway. Between summer and winter, passenger carryings on this line are estimated to show a greater disparity than on any other Highland line; the average summer traffic is more than three times the average winter traffic and in the summer season there are days of peak traffic when nearly 2,000 seats are provided on all trains to and from Mallaig, and all of these are taken up. In summer, observation cars run between Glasgow and Fort William and between Fort William and Mallaig. On the Glasgow-Fort William section the connection with the Loch Lomond steamer service at Ardlui, and the connection with the Dunblane-Oban line at Crianlarich makes possible scenic tours on a circular route. There are sleeping cars every week day between Fort William and London, and restaurant cars on the main trains.

24. *Winter operation.* In winter, the whole area north of Crianlarich is liable to heavy falls of snow, but, generally, rail services are not interrupted.

25. The West Highland Railway from Banavie to Mallaig and the Highland Railway from Strome Ferry to Kyle of Lochalsh were constructed with some Government assistance, but generally the Highland railway lines are the outcome of competing endeavours of the former Caledonian, Highland and North British Railway Companies to tap and create Highland and Island traffic, including fisheries traffic; hence the fact of three separate lines to the west coast and the development of Kyle and Mallaig as well as Oban as steamer ports for the Hebrides. These railway lines provide comfortable means of passenger travel and link the Highlands to the rest of Great Britain by long distance trains and connections; they are able to cope with the high peaks of passenger travel of the summer months, and play a very important part in the Highland tourist industry. Coal makes up about a third of their freight carryings (some liquid fuel also being carried) and general merchandise (including agricultural traffic) another third. Seasonal livestock carryings on all lines are considerable. The lines to Fort William and Ballachulish have considerable industrial traffic and can continue to operate throughout the worst of the Highland winter.

ROADS

26. Since our concern is with arterial communications in the Highlands, we have limited our scope to trunk roads. We are thus again confined to the mainland, for there are no trunk roads in the islands (though we shall refer again to that matter). The highway authority is the Secretary of State, operating through the Scottish Development Department.

27. The Highland trunk road system has two main strands, A9 from Perth to

Inverness and Wick; and A82 from Balloch at the south end of Loch Lomond to Fort William and Inverness. From A9, spur trunk roads run from Wick to Thurso and from Dingwall to Ullapool on the west coast of Ross-shire. From A82, trunk spurs run from Invergarry in the Great Glen to Kyle of Lochalsh in South West Ross-shire, from Fort William to Mallaig in Western Inverness-shire, from Tyndrum on the Argyllshire-Perthshire border to Oban, and from Tarbet on Loch Lomond side to Lochgilphead near the mouth of Loch Fyne. There are also lateral trunk roads in Argyllshire from Lochgilphead to Oban and from North Connel at the mouth of Loch Etive to Ballachulish. The trunk road from Stirling to Crianlarich provides access from south east Scotland to Oban and Fort William.

28. In describing the trunk roads we say a good deal about the extent to which they are or are not considered by the Department to be 'over-loaded'. 'Over-loading' is calculated with reference to the point beyond which the density of traffic is greater than is desirable for free flow and general convenience, though serious congestion and the dangers that result therefrom may not begin until overloading approaches 100%. The point of overloading or theoretical capacity is calculated for each section of road, having regard to its width and alignment, in terms of passenger car units, as a convenient way of stating traffic density. In this reckoning a large bus or large lorry counts as three passenger car units or, to put it another way, it is assumed that the contribution made to traffic density by such vehicles is equivalent to that made by three motor cars. The point of overloading of a single width (10 ft.—11 ft. width) road of good alignment with passing places at about 150 yard intervals is reckoned to be about 800 passenger car units per day. For an 18 ft. road of good alignment the point of overloading is taken to be 4,200 p.c.u.s.; for a 24 ft. road 6,000 p.c.u.s.; for a three lane road 11,000 p.c.u.s. and for dual carriageways 25,000 p.c.u.s. The actual traffic carried is then compared with this theoretical capacity. Where no later count has been taken, an appropriate growth of traffic has been assumed since the last national traffic census of August, 1954. A census was taken on trunk roads in the third week of August, 1961, and the provisional results of this census have been shown in Appendix III which also gives a description of the Highland trunk roads in tabular form. Overloading so calculated is, of course, overloading at mid-August*, though this is not the absolute tourist peak which is at the end of July and the beginning of August. Outwith the main holiday months, motor car traffic falls off sharply on most of the Highland trunk roads and August 'over-loading' may well become October 'underloading'. In comparing the monthly variation of traffic in the Highlands and in Scotland as a whole it is noticeable that the July and August figures expressed as a percentage of the average month are appreciably greater in the Highlands.

Perth-Inverness (A9)

29. This road runs alongside or near the Perth-Inverness railway line from twelve miles north of Perth to about the same distance south of Inverness. From Perth to Blair Atholl the width is about 20 ft. and the alignment only fair, except where in recent years certain sections have been reconstructed to a 24 ft. width

*The figure taken is the daily average over the seven day census, each day covering sixteen hours (6 a.m. to 10 p.m.). At some points there are wide fluctuations between weekdays and weekends and even wider fluctuations between peak hours and slack hours. There may therefore be considerably greater overloading at peak hours than the daily average figure indicates.

on a good alignment. Apart from these improved sections, this length is at capacity between Perth and south of Dunkeld and 10% under capacity as far as Blair Atholl. From Blair Atholl to Inverness the road was improved to a good alignment over 30 years ago except at some railway bridges. The width is only 18 ft. but even so loading is 35% under capacity. The higher sections of this road (Drumochter and the Slochd) are liable to blockage in severe winter weather.

Inverness-Wick-Thurso (A9/A882)

30. This road keeps to the coast and the road distance from Inverness to Wick is a good deal shorter than the rail distance—125 miles (assuming that the direct route A836 over Struie is used instead of the trunk road via Tain) as opposed to 161 miles by rail. The width is from a narrow two-lane (about 20 ft.) on the southern sections to 18 ft. (and even 16 ft. in places) in Sutherland and Caithness. The road has not been subject to comprehensive reconstruction and its alignment is only fair, though it is reasonably good between Wick and Thurso. The worst features between Brora and Wick (notably Berriedale Hill) have been improved or will be during the next few years. Overloading from 20% to 10% occurs on the southern 30 miles of this road. North of this loading is from 60% to 70% under capacity. The coastal sections of this road in Sutherland and Caithness are very exposed and liable to blizzard in winter. The Struie Hill short cut in Easter Ross is also sometimes blocked by snow.

Balloch-Tyndrum-Fort William-Inverness (A82)

31. From Balloch in Dunbartonshire for 17 miles along the side of Loch Lomond to Tarbet the alignment is poor, the width is narrow two-lane to 18 ft. (and even less between Luss and Tarbet) and overloading is from 30% to 10%. From Tarbet to Crianlarich the width varies from 15 ft. to 18 ft., alignment is poor and the sides of the road weak, but loading is 40% under capacity. The 5 miles from Crianlarich to Tyndrum which also carry traffic using the Stirling-Crianlarich road are narrow two-lane, also on a poor alignment, and loading is 10% under capacity. From Tyndrum all the way to Inverness (except for the 16 mile length on both sides of Loch Leven) the road was reconstructed to a good alignment before the war and though the width is only 18 ft. the traffic is from 25% to 55% below capacity. The toll ferry across the narrows at Ballachulish avoids the journey around the head of Loch Leven and saves about 12 miles but it is liable to delays in summer and is unsuitable for heavy traffic. In winter the Glencoe section of the road is liable to blockage by snow. By road the distance from Glasgow to Fort William via Ballachulish Ferry is 101 miles, as compared with the railway's 123 miles.

Dingwall-Garve-Ullapool (A834), (A832) and (A835)

Garve-Strome Ferry-Auchtertyre (A832) and (A890)

32. For 13 miles from Dingwall to Garve the trunk road (A834) is narrow two-lane and of poor alignment but it is 55% under capacity. The length from Garve to Ullapool (A835) is 32 miles, over two-thirds of which is single carriageway. The alignment, particularly between the junction with A832 at Braemore and Ullapool is poor. The single way lengths are 50% overloaded. From Garve the Class I road (A890) takes the same route as the railway as far as Strathcarron, from there the railway runs along the south side of Loch Carron to Kyle but the road runs along the north side of the Loch to Strome, and traffic for Kyle has

to cross Loch Carron, by the vehicular toll ferry, to South Strone. From there it runs south to join the Invergarry-Kyle of Lochalsh trunk road, A87, 7 miles to the east of Kyle. This Class I road is single carriageway, has poor alignment and is up to 50% overloaded.

Invergarry-Kyle of Lochalsh (A87)

33. This road is single width and of poor alignment except on the eight miles over the hill from Glengarry to Glenmoriston which was reconstructed recently to 18 ft. width on a good alignment and on the further recent construction of 3 miles at Cluanie Inn. The reconstruction of a further five miles west of Cluanie Inn is shortly to start. The single width sections are 100% overloaded; on the 18 ft. sections loading is 70% under capacity. With the Caledonian Steam Packet Company's vehicle ferries at Kyle this is at present the main road to Skye from Glasgow and from Inverness. This fact and its own scenic magnificence accounts for the high peak of summer traffic: but it is very inadequate both as to width and alignment.

Fort William-Mallaig (A830)

34. This road follows the same route as the railway line. For all but its first three miles it is a single width road with alignment varying from good to very poor. Work is now in progress between Glenfinnan and Lochailort which will convert 11 miles (which hitherto had an alignment and width as Thomas Telford constructed it 150 years ago) into an 18 ft. road on a good alignment. The Scottish Development Department expect that as soon as the Glenfinnan-Lochailort section has been completed traffic will increase, especially tourist traffic, and that severe overloading of the single carriageway lengths will occur during the peak season. At present the single carriageway lengths are somewhat overloaded but the two way length through Corpach is 10% under capacity.

Tyndrum-Oban (A85)

35. This road follows for most of its length the same route as the railway line from Tyndrum to Oban. Alignment is good and there is an 18 ft. carriageway; loading is from 35% to 55% under capacity but the last five miles into Oban are 15% overloaded.

Stirling-Crianlarich (A84)

36. This road follows the same route as the eastern part of the Stirling-Oban railway. Alignment varies from good to poor and the width is narrow two-lane but loading varies from near capacity to 40% under capacity. There are a number of railway bridges east of Crianlarich which restrict the height of vehicles, such as cattle floats, using the road. A start has been made on eliminating these low bridges.

Tarbert-Lochgilphead (A83)

37. Almost the whole of this road has been reconstructed to an 18 ft. width on a satisfactory alignment. The section between Tarbert and the junction of the Dunoon Road A815 is the most heavily trafficked but loading is 15% under capacity. Loading on the rest of the road is from 50% to 60% under capacity.

Lochgilphead-Oban (A816)

38. Throughout, this road is 16-18 ft. wide and alignment is poor but loading is 65% under capacity.

Connel-Ballachulish (A828)

39. This road runs alongside the Connel-Ballachulish railway. It is 16-18 ft. in width and has poor alignment except where reconstruction has taken place on the northern half of the road. Loading is 70% under capacity. Connel Railway Bridge is owned by the British Transport Commission but road vehicles, subject to a restriction as to width and height, are permitted to use the bridge on payment of a toll.

40. As traffic arteries, these roads (except for the height restriction on the Stirling-Crianlarich Road the weight restriction of 14 tons on the Fort William-Mallaig Road and the restrictions at Connel Railway Bridge) are able to take the largest vehicles in current use but certain of them have serious shortcomings as follows:

(a) The single width sections of three spur trunk roads have poor alignments and the present traffic conditions there are such that

(i) the Mallaig road (A830) is already somewhat overloaded and conditions on the single width sections will worsen when the present roadworks are completed.

(ii) the Kyle of Lochalsh road (A87) is 100% overloaded.

(iii) the Ullapool road (A834) is about 50% overloaded.

(b) A9 between Inverness and Dingwall is 20% overloaded and between Dingwall and Evanton 10% overloaded.

(c) A9 north of Brora has lengths where the carriageway is as narrow as 15-16 ft. and there are isolated sections with steep gradients, hairpin bends and narrow and weak bridges, e.g., Berriedale (partly improved however), Dunbeath, Latheronwheel.

In addition the main access roads to the Highland area have the following defects:

(a) The Loch Lomond Road A82 from Balloch to Tarbet is up to 30% overloaded and on the whole is narrow and badly aligned.

(b) A82 between Tarbet and Crianlarich, although not overloaded, is narrow, poorly aligned and has weak haunches.

ROAD HAULAGE

41. Regular road haulage services, from nightly long distance trunk runs to daily rounds in some of the burghs are provided in the Highland mainland by private operators, by British Road Services in Argyllshire and to Inverness, and by David MacBrayne Ltd. in Argyllshire and Inverness-shire. In addition to regular services, all these operators provide occasional services as required especially for bulk and full loads within the areas of their licences from the Traffic Commissioners, and consignments are transmitted to and from other parts of Scotland and England. Of the islands only Skye has through road haulage services to and from the mainland since as yet it alone has a vehicle ferry connection. In all the other main islands road haulage services operate from the

ports of call of steamers providing mail ship or cargo connections with the mainland.

42. Official statistics do not now provide the information we require for the Highland counties but the statistical picture of road haulage in the mainland Highlands and in the Inner and Outer Hebrides presented by Dr. Skewis and reproduced in Appendix IV shows how 'A' and 'B' licences had developed by 1958. Throughout the Highlands and Islands as throughout Great Britain there are three distinct types of licence available. The 'A' licence is the carrier's licence for hire or reward only, the 'C' licence is for the holder's own goods, while the 'B' licence allows the carriage of his own goods and also of others for hire or reward within the restrictions of the licence. As Dr. Skewis says, 'A' licences 'require a considerable amount of regular available traffic to keep them employed while the "B" licences are usually only partly dependent on road haulage for a living . . . One of the advantages of the "A" licence is the relatively free range of operation attached to it. This freedom is generally of little value to hauliers in the Isles and consequently the "B" licence predominates'. Dr. Skewis also draws attention to the fact that the Hebrides have the highest numbers of haulage vehicles per thousand of population in Scotland.

43. There is no reliable indication of the tonnages of freight carried by road in the Highlands and without that information to set against the corresponding figures that have been supplied to us for rail by British Railways it is not possible to make a firm evaluation of the role of road transport. In 1958 the Ministry of Transport made an estimate of the national apportionment of traffic between road and rail* and concluded that road transport had by then become the major means of the inland carriage of goods in the United Kingdom. Post-war industrial development seems to have been the principal reason for this but industrial growth has not taken place in the Highlands as it has elsewhere so it is not safe to assume that the national 60 : 40 split of traffic between road and rail which the Ministry's estimate suggested in 1958 is true of the Highlands today. In an endeavour to make a partial assessment by an indirect method we examined the agricultural, fish and forestry production statistics for the area and subtracted from these figures the local tonnages of rail traffic making due allowance for local consumption. It might then be assumed that the balance of this production left the Highlands by road haulage. This rough calculation proved too unreliable a form of calculation to be of value as it could take no account of the element of distance, a ton of freight carried by one means from say Inverness to Perth being equated with a ton by the other from Inverness to London. All we can say with confidence, therefore, is that even in the inadequate state of Highland roads, road haulage finds it worthwhile to compete with rail for all traffics except heavy fuel traffic but that it does not seem able at present to take over from the railways the entirety of heavy seasonal traffic, long distance traffic and small consignment conveyance. It is not known whether road haulage, if left to itself and given the opportunity, would expand to provide adequate services for these traffics but we must stress the importance to the Highland economy of its facility of speedy through transit from consignor to consignee and elimination of handling

*Ministry of Transport and Civil Aviation—the Transport of Goods by Road—H.M.S.O. (1959). See also 'Statistics of the Transport of Goods by Road' by K. F. Glover in Series A, Volume 123 of the 'Journal of the Royal Statistical Society'.

difficulties and costs. The development of agriculture and fisheries in the Highlands since the war has been increasingly influenced by the development of road transport.

ROAD PASSENGER TRANSPORT

44. In our first report we considered in some detail the difficulties being met by operators both of the longer distance and the more local bus services in the Highlands and Islands. For our present purposes we mention only the longer distance bus services of the mainland Highlands. There is of course no clear dividing line between these and the more local services on the arterial routes of the Highlands but the services which may properly be termed 'longer distance' are those operated by the companies of the Scottish Bus Group (i.e., Scottish Omnibuses Ltd., W. Alexander and Sons Ltd., and Highland Omnibuses Ltd.) in summer between Glasgow and Inverness, Edinburgh and Inverness, Inverness and Thurso, and all the year round between Glasgow and Oban and Inverness and Fort William. Into this category also come the services of Messrs. MacBrayne, operated all the year round (but only at weekends in winter) between Glasgow and Fort William, and all the year round between Fort William and Inverness and Glasgow and Campbeltown. Services which cover long distances yet are also 'local' are those of Highland Omnibuses Ltd., operated throughout the year between Inverness and Helmsdale and Inverness and Dornoch, the services of Messrs. MacBrayne operated throughout the year between Fort William and the railheads at Tyndrum and between Kyle of Lochalsh and Inverness. (The Kyle/Inverness service runs on Saturdays only during the winter and on Tuesdays and Saturdays only during the summer. It operates via Invermoriston and serves a different part of the country from Kyle railway). Appendix V gives further information about these services. It will be seen from this Appendix that bus services to varying extents provide alternative means of travel to the railways except for the Fort William-Mallaig, Stirling-Crianlarich, and Dingwall-Kyle lines. They do not everywhere provide the daily all-the-year-round transport facility which the railways offer, and although the capacity of services is 'unlimited' in the sense that duplicate vehicles can be put on as necessary, the average and peak carryings in the busy season are well below those of the railways.

45. Both the Scottish Bus Group and David MacBrayne carry out a great deal of private hire and contract work. This takes away some traffic which might otherwise go by public transport but revenue from these sources helps to make up for losses involved in maintaining certain of these Companies' stage services.

SEA SERVICES

46. In the West Highlands and Hebrides David MacBrayne Ltd., whose share capital is owned half by the British Transport Commission and half by Coast Lines Ltd. and who operate under contract with the Government, provide sea services for passengers and freight as well as the bus and road haulage services already mentioned. The Caledonian Steam Packet Co. Ltd., a subsidiary of the British Transport Commission, operate on the Clyde (on which Messrs. MacBrayne also have a service) and they operate the vehicle ferry service from

Kyle of Lochalsh to Kyleakin in Skye. Coast Lines Ltd. operate regular cargo services to Stornoway from the East of Scotland. Tramp shipping, mostly by 'puffers', from the Clyde operates throughout the area.

47. As already mentioned three of the Highland railway lines and three of the Highland trunk roads end on the west coast (at Oban, Mallaig and Kyle of Lochalsh). From these ports mailship services of Messrs. MacBrayne leave for the Inner and Outer Hebrides; Oban serves Mull, Coll, Tiree, Barra and South Uist; Mallaig serves Skye, the Small Isles and the Uists; and Kyle serves Skye, Lewis and Harris. The Company operate a mailship service for Islay, Jura, Colonsay and Gigha from West Loch Tarbert and this runs in connection with their mailship service from Gourock to East Loch Tarbert. The Caledonian Steam Packet Company Ltd. operate a summer service from Gourock to Campbeltown. Regular cargo ship services for the Inner and Outer Hebrides from the Clyde are operated by Messrs. MacBrayne and at the times of the seasonal sales some of the Company's cargo ships are used as livestock carriers from the islands to the west coast ports.

48. The volume of sea service traffic is indicated by the figures in Appendix VI. As with all other forms of public transport in the Highlands, passenger traffic is acutely seasonal. It will also be noted that although the Highland railway lines are under-trafficked, heavy cargo for the Inner and Outer Hebrides goes by ship from the Clyde rather than by rail to the west coast ports and onward by ship. MacBrayne's convey freight by cargo ship at rates less than those the islanders would have to pay if goods were conveyed by rail to west coast ports and onwards by the shorter sea journey to the islands. Nevertheless, a third of MacBrayne's freight traffic, mostly in consignments of under one ton, goes by their mailship services. Some of this represents traffic between the eastern or western Highlands and the Hebrides which could not be conveyed by the cargo services from the Clyde, and some is made up of perishables which are not suitable cargo ship traffics. Messrs. MacBrayne have told us, however, that there is generally a growing preference for the speedier transit, even at greater transport costs, which is afforded by the mailships.

49. The Coast Lines service to Stornoway, which is of weekly frequency, provides a sea connection between Stornoway, Leith, Aberdeen, Ireland and North East England. The carryings of this service are understood to amount to about 15% of the total cargo traffic to Stornoway. Puffer traffic throughout the West Highlands and Hebrides is very considerable. These vessels are primarily coal carriers from the Clyde and Ayrshire ports to the various island and west coast harbours, but they take bulk loads of other traffic notably in connection with the Islay distilleries.

50. Orkney and Shetland are served by the North of Scotland, Orkney and Shetland Shipping Company Ltd. a subsidiary of Coast Lines Ltd. from Leith and Aberdeen to Kirkwall and Lerwick and by the Company's mailship across the Pentland Firth from Scrabster to Stromness. The North Isles of Orkney are served by a government-sponsored company brought into being in 1961 to provide improved passenger and cargo services for the North Isles with new tonnage which is at present being built. The North Isles of Shetland are served from Lerwick by a passenger mail and cargo ship of the North of Scotland, Orkney and Shetland Shipping Company Ltd. but passengers and parcels traffic also travels by a succession of bus and ferry services to the islands of Yell and Unst.

51. Piers and harbours for all these services of the Highlands and Islands are provided by British Railways at the rail termini of Oban, Mallaig and Kyle; and elsewhere either by Town or County Councils or local Harbour Commissions. Messrs. MacBrayne own three island and four mainland piers in the area they serve.

AIR SERVICES

52. The first air service to be introduced in the Highland area began to operate in 1933, and before the war, services had developed to Campbeltown, certain of the Western Isles, Orkney and Shetland.

53. Since the war Highland air services have developed in a comprehensive manner and to a very considerable extent. The construction of R.A.F. airfields during the war throughout the Highlands was—literally and figuratively—the foundation of this development. The services are all provided by British European Airways. The aircraft employed, dependent on the capabilities of the various aerodromes as well as the traffic potential, are the 61 seater Series 701 Viscount, the 44 seater Dart Herald and the 14 seater Heron (which also acts as the ambulance aircraft in the area). Services are mostly of week-day frequency, but with greater frequency on the busier routes in summer. The services run from Glasgow to Campbeltown and Islay; to Tiree and Barra; to Benbecula, Stornoway and Inverness; to Inverness, Wick, Orkney and Shetland; from Aberdeen to Wick and Kirkwall, and to Shetland. Air services, therefore, extend to the limits of the Highland area and also, through-air connections to and from the south at Glasgow and Edinburgh, are part of the internal air network of the United Kingdom.

54. The aerodromes of the area are, with the exception of the beach landing ground at Barra, all operated by the Ministry of Aviation. As indicated above the capabilities of these aerodromes vary widely. Inverness, Stornoway, Benbecula, Wick, Kirkwall and Macrihanish can take Viscounts. The Ministry of Aviation have told us however that the cost of making Sumburgh and Islay suitable for Viscounts would be prohibitive.

55. Air travel has removed obstacles of distance in the Highlands and Islands. Glasgow to Stornoway by surface travel takes 14 hours; by air it takes 2 hours. Aberdeen to Shetland—12 hours of sea crossing—is an 80 minute flight. The whole of the area except the Western Highlands, Skye and Mull has benefited from the air services; and the greater the distance from central Scotland the greater the benefit because air travel from Lewis to Glasgow and between Aberdeen and Orkney and Aberdeen and Shetland gives an alternative service to overnight surface travel. The services are primarily passenger services but some freight, the letter mail and newspapers are carried. Freight consists of a wide variety of traffic (from spare parts for tractors to day old chicks and lobsters), 'fragile' traffic (such as television sets), and a wide range of miscellaneous traffic which takes advantage of the speed of air travel. Mails and newspaper traffic cut down the seating capacity of aircraft on certain runs.

56. It appears that a large sector of the population of the Highlands area, especially the population of the Islands, now look on air services as the normal means of travel to and from central Scotland and to and from the South. But the air services are uneconomic because of the low revenue rate, peak traffic and low

average sector distances. Poor utilisation is a function of the last of these two. During the summer season seats on air services have to be booked in advance but only on certain holiday weeks in the year and according to the routes, whereas a passage (though not a berth) on the ships which ply to and from the mainland ports is always available; the railways, too, can generally arrange to carry all the passengers who wish to travel, when they wish to travel. Considerations of cost apart, this present inability to cope with the volume of traffic at peak periods means that air services, though they have become an essential feature of passenger transport, are very far from being able to replace surface passenger transport.

57. A considerable tourist traffic is carried by the air services though there are so far no inclusive air tours in the Highlands and Islands—despite the obvious scenic attractions of the area and the ease by which the islands can be reached by air.

58. Statistics of the passenger and freight carryings of the Highland and Island air routes are given in Appendix VII.

PART III TRENDS OF TRAFFIC

A—RAILWAYS

Trends of Traffic

59. The information provided for us by British Railways indicates a heavy fall in goods traffic on the Highland lines. The comparison of carryings of 1960 and 1961 with those of 1949 is as follows:—

	Tonnage of Freight including Livestock Forwarded and Received			Number of Parcels		
	1949	1960	1961	1949	1960	1961
West Highland Line	205,000	174,646	188,084	116,000	92,367	96,243
Inverness/Kyle of Lochalsh	39,653	21,887	24,644	372,103	293,525	324,782
Inverness/Wick and Thurso	335,985	191,831	271,138	515,732	467,341	488,859
Perth/Inverness	424,426	231,643	220,345	665,459	625,575	625,906
Dunblane/Oban	136,660	92,875	92,067	168,429	123,700	118,126

This overall fall in freight traffic is, of course, an example of the general decline in railway freight carryings which has taken place in the past ten years throughout the country; whereas these amounted to 22.4 thousand million ton miles in 1952 the total had dropped to 18.6 thousand million ton miles in 1960 and to 17.6 thousand million ton miles in 1961—a decline in considerable

measure due to falling off of coal and mineral traffic and no doubt to some extent to road haulage competition.

60. The view expressed by our Working Party however is that the present trend from rail to road haulage in the Highlands may now have gone as far as it is likely to go, given existing facilities and charges (indeed the recovery indicated by the 1961 figures as compared with the 1960 figures may be significant); and that road haulage has already taken as much of railway freight traffic in the Highlands as it could handle at less transport cost of the consigner. This must be qualified however if the railways become more selective in their choice of traffic and if their charging policy favours bulk loads, which are lacking in the Highlands, and discriminates against small and seasonal consignments, which at the present time make up a substantial part of Highland goods traffic. The effect of such a tendency would be to increase the amount of goods going by road. Improvement of road access to Mallaig and Kyle may also result in an immediate intensification of road haulage competition with the railway lines to these ports. The introduction of vehicle ferry ship services to the Hebrides (on which we say more later) may also have an adverse effect on railway carryings. There is, however, a prospect of new freight traffic for the railways in the conveyance of timber and other raw material to and the products from the proposed pulp and paper mill near Fort William, and we understand that the railway would be of vital importance to this project. It is also the expectation (though this is less immediate) that further industrial development will in time take place in the Inverness area and along the coastal strip northwards, as overspill from the congested industrial areas of the south. Industrial developments of this kind might be expected to generate, and indeed to rely on, long distance rail traffic.

61. The trend of passenger carryings in the Highlands is more difficult to establish since information about the total number of passengers travelling annually over each section of the Highland system is not available. The figures which are available of passenger bookings made at stations on the Highland lines may reflect well enough the trend of local demand but they do not include, for example, Glasgow or Edinburgh bookings for the Oban line or for the whole Perth-Inverness-Kyle-Wick-Thurso system; and it may well be that bookings from Glasgow and Edinburgh may well form the greater part of passenger traffic on these lines. Furthermore, railway passenger traffic originating within the Highland area is the kind of traffic which might be expected to go over to private motoring to a rather greater extent than traffic originating outside the area. The figures of passenger bookings made within the Highland area, contrasting 1949 with 1960 are as follows:—

	Passengers Booked	
	1949	1960
West Highland Line	112,000	94,139
Inverness/Kyle of Lochalsh	65,337	56,950
Inverness/Wick and Thurso	137,259	104,629
Perth/Inverness	247,478	264,996
Dunblane/Oban	135,107	106,547

62. The decline in passenger bookings is not nearly so marked as the decline in goods traffic over these years and there has actually been an increase in bookings on the Perth-Inverness line. Indeed, as the figures are incomplete, it may well be that over these years passenger carryings on the Highland lines have fallen little if at all, and this may reflect their function in providing reliable and comfortable passenger links with the rest of the country. They are of course much more heavily used in summer and, as indicated in Part II, operate to capacity at peak periods.

63. Diesel traction has now been introduced on all the Highland lines and the whole system has benefited from the general improvements which modernisation has brought, notably in passenger comfort, in speeding up of services, in improved arrangements for freight transport by road to and from railheads, in rolling stock and in the rationalisation and improvement of marshalling yards. On the Inverness-Wick line 23 little-used railway stations (representing about one-half of the total number of stations) have been closed to passenger traffic. These railway stations had greater relevance to the passenger transport requirements of the area when the effective radius of a railway station was the distance served by pony and trap and their closure combined with the introduction of diesel traction has made possible a reduction in the time of travel between Inverness and Thurso from over six hours to four hours.

64. Clearly, however, the most important element in assessing present trends on the railways, and in predicting the future, is the studies, covering the whole of Great Britain, into railway traffics, their profitability, and their prospects for the future that the B.T.C. have put in hand. Their results are not yet available, but they should above all provide a more reliable statistical basis than has been accessible hitherto.

B—ROAD TRAFFIC

65. A preliminary analysis by the Scottish Development Department of the traffic census taken on trunk roads in August, 1961 shows the following percentage increases—calculated as passenger car units (p.c.u.'s.)—compared with 1954 on the trunk roads described in paragraphs 29—39:—

	Percentage Increase 1954 to 1961		
	Maximum	Minimum	Average
Perth-Inverness (A9)	72	26	50
Inverness-Dingwall (A9)	47	34	41
Dingwall-Thurso (A9 and A882)	135	33	62
Balloch-Crianlarich (A82)	64	43	53
Crianlarich-Fort William-Inverness (A82)	109	21	79
Dingwall-Garve-Ullapool (A834/A832/A835)	101	15	14
Invergarry-Kyle of Lochalsh (A87)	212	100	144
Fort William-Mallaig (A830)	97	45	86
Stirling-Crianlarich (A84)	75	55	63
Tyndrum-Oban-Ballachulish (A85 and A828)	115	70	83
Tarbet-Lochgilphead-Oban (A83 and A816)	103	31	64

The overall increases of 50, 60 and 70% in the seven years 1954-61 represent annual increases of about 6, 7 and 8% compound respectively. The average

increase for Scotland is 67 %. There has been a larger increase in traffic on some of the more remote Highland trunk roads than elsewhere in Scotland. The private car doubtless accounts for the main increase in traffic in the Highlands: heavy goods vehicles certainly have not, with few exceptions, increased as much as the Scottish average (40 %).

66. These figures, altogether, indicate the rapid growth of road traffic. Such a pronounced trend is unlikely to alter suddenly. For the foreseeable future therefore plans should be made on the assumption that the present trend will continue.

Road Haulage

67. There is no doubt that there has been an increase in road haulage in the Highlands though it may not have been so great as in other parts of the country. The Ministry of Transport's annual published census of road motor vehicles shows an increase in goods vehicles licensed in the whole Highland area from 7,263 in 1955 to 8,072 in 1960: the figures for each Highland county are given in Appendix VIII. But of course this 10 % increase does not represent the whole story, for road haulage to and from the Highlands is also undertaken by vehicles recorded elsewhere. The national growth of road freight traffic was estimated by the Ministry of Transport to have been from 18.8 thousand million ton miles in 1952 to 23.1 thousand million ton miles in 1958*; and this is estimated to represent an increase from 46 % to 56 % in the road transport share of freight carryings in the country. The average increase in heavy commercial traffic (vehicle miles) using all the trunk roads in Scotland between 1954 and 1961 is estimated to be 40 % but the Scottish Development Department inform us that the trunk roads in the Highlands with only a few exceptions, show a lower rate of increase than this average.

68. In the Highlands as elsewhere there has been a steady improvement in the capacity and performance of vehicles and this must be taken into account in evaluating the effect of the increase in goods vehicles. Vehicles with a carrying capacity of fifteen tons are now in common use between Lowlands and Highlands as are three-tier livestock floats.

Road Passenger Transport

69. The longer distance stage services to the Highlands, with which we are concerned here, are provided principally by the Scottish Bus Group and by David MacBrayne Ltd. Appendix V gives information provided by these operators of their carryings over the last ten years. From these it will be seen that the trend has been generally for the carryings of these services to fall.

70. There is no doubt in our minds that the over-riding reason for this is the increased use of private cars. As we said in our first report:

'Almost everyone who is able to do so provides his own form of transport. There were in 1959 nine persons per car or motor cycle throughout the Highland area, but if allowance is made for the generally lower number of vehicles per head of population in the burghs, the considerable number of goods vehicles (whether of farmers or of others) which also act as private passenger transport, and the extent to which "private passenger transport" is increasing yearly, then the extent of the present "competition" to established bus services can be appreciated'.

*Statistics of road transport—Ministry of Transport & Civil Aviation, 1959.

Appendix VIII gives the motor car census figures (from the Ministry of Transport's published annual census of road motor vehicles) for 1960 as contrasted with the figures for 1955. These figures indicate that during this period there was a 57% increase in motor car ownership in the area.

71. There has also been a striking increase in bus tour traffic. The figures published by the Scottish Tourist Board in their report for 1961 show for example that the number of passengers carried on extended bus tours in Scotland has increased from 74,347 in 1956 to 90,963. It may be significant that the majority of the passengers were from England and Wales (70,034 in 1961). Routes vary and it is not possible to say with precision how many passengers travel to the Highlands but the Board estimate that of these 70,034 passengers at least 50,000 were carried north of Perth.

72. Buses continue to improve in general standards of comfort. Buses of up to 36 ft. in length and 8 ft. 2 inches in width can now operate throughout Great Britain. The easing of restrictions on the speed of buses travelling in open country from thirty to forty miles per hour should also assist the competitiveness of long distance road passenger transport in the Highlands, as elsewhere.

Roads

73. We have been informed by the Scottish Development Department that during the next ten years the bulk of Government funds for the major improvement of trunk roads in Scotland will be applied to comprehensive reconstruction of overloaded roads (some more than 100% overloaded) in and near the central industrial belt. A programme of work will include a start on the improvement of the Loch Lomondside sections of A82 (which as we have already shown are part of the main road access to the West Highlands from Glasgow and are overloaded in summer). But the Department is unable to say what large trunk road schemes will be carried out in the Highlands during this period. They have, however, informed us that it is unlikely on present expectations that the reconstruction of the single carriageway spur trunk roads to Mallaig, Kyle and Ullapool to an 18 ft. carriageway width will be completed before the mid 1970's. Other schemes which might be undertaken (though no date is given for their starting) are the replacement of Conon Bridge (on the Inverness-Dingwall Trunk Road A9) and the reconstruction of a bridge over the narrows of Loch Leven at Ballachulish to replace the present vehicular toll ferry which would shorten the distance by road between Glasgow and Inverness via Fort William by 12 miles. Further the Crofter Counties programme which includes the reconstruction of two lengths of trunk road, namely the Connel-Balachulish Road A828 and the Lochgilphead-Oban Road A816 has been considerably accelerated and is now running at £2m. a year. The programme should be completed during the 1970's.

74. The Department, however, state that it should be possible to carry out many smaller schemes to improve parts of the trunk roads in the Highlands and they draw attention to the intended construction by 1966 of the Class I road to by-pass Strome Ferry (and thus provide a through road between Kyle and Dingwall) and the agreed proposals to complete two new lengths of Class I road by 1963 and 1965 respectively linking Shieldaig with Torridon in Wester Ross and Kinlochmoidart with Inverailort in Western Inverness-shire which will make good two hitherto missing links in the 'West Coast Highway' which has long

been felt to be one of the main needs of a more vigorous Highland tourist industry. The construction of these new roads will, however, further build up summer traffic on the Mallaig-Kyle trunk-roads and will throw their shortcomings into still harsher relief. We will return later to the consideration of the effect on the future development of West Highland transport of this prolonged delay which is proposed to the improvement of the single width trunk roads.

C—SEA SERVICES

Trends in Traffic

75. The trends of sea service carryings of Messrs. MacBrayne's ships are given in Appendix VI. The trends of passenger traffic since 1952 show a decrease on the Company's Clyde service (this appears to be largely due to development of car ferries on the Clyde by Caledonian Steam Packet Company), and a decrease on the Portree (Isle of Skye) mail service (and this is obviously due to the scaling down of this service and its partial replacement by road services using the Kyle-Kyleakin vehicle ferry and by the Mallaig-Armadale sea crossing). But all the rest of the Company's services with the single exception of their Outer Isles mail-ship service (which operates to Harris and the Uists from Kyle and Mallaig) show increases, in some cases substantial increases. These it appears are due largely to the build up of tourist traffic. Appendix VI also gives the yearly increasing carryings of the Kyle-Kyleakin vehicle ferry service. We quote the figures because of the steep rise in traffic (we understand especially in tourist traffic) which was effected by this, the first island vehicle ferry service in the area.

76. Freight and livestock carryings by Messrs. MacBrayne's services have increased. There has been a significant increase in demand for motor car access to and from the Inner and Outer Hebrides which MacBrayne's 'conventional' mailships have not altogether been able to meet although extra runs have been put on in the summer season to Mull and to Islay to cope with the motor car traffic.

77. This development of motor car traffic to Skye and even on conventional mailships has encouraged Messrs. MacBrayne to seek Government approval to the replacement of a number of their mailships by general purpose ships equipped with vehicle lifts and holds which will take motor cars, buses, road haulage vehicles and livestock as well as passengers. The Company's proposals are for the introduction of three vehicle ferry services:

- (1) between Oban, Mull and Morvern;
- (2) between Mallaig and Armadale (with possibly an extension to South Uist);
- (3) between Uig (North of Skye), Lochmaddy (North Uist) and Tarbert (Harris).

This kind of ship has proved its value on the Clyde services of the Caledonian Steam Packet Company Ltd. In the Hebrides a service by similar ships is intended, first, to promote the growth of the tourist trade in areas which have so far benefited little from the great advances made by that industry in the Highlands. The Oban and Mull and Morvern ferry will help to feed the Mallaig, Armadale, South Uist ferry since tourist traffic may be expected to move from one ferry to another through Morvern and Moidart along the length of the new road which it is proposed to construct between Kinlochmoidart and Inverailort (paragraph

74) to link these areas with the Fort William-Mallaig trunk road. The Mallaig-Armadale-South Uist service will in turn feed the Uig-Lochmaddy-Tarbert service.

78. The Company envisage that these services will develop a through bus traffic and through lorry traffic to the Hebrides as well as the motor car tourist traffic. They also consider that they will provide a more efficient, quicker and cheaper service for freight since intermediate loading should be eliminated. This may in turn affect the Company's cargo services from the Clyde, and we return to this point later in this Report.

79. Sea services to Shetland and Orkney have been modernised since the war by the construction of new tonnage for passenger and cargo services. The two new mailships, each of over 2,000 tons, built by the Company have not only done a great deal to improve the Shetland tourist industry by their greater accommodation and the 'round cruise' facilities they offer but they have also provided improved services for the conveyance of cargo traffic, especially with their refrigerated stores for the catch of the Shetland fishing fleet. The Company have also built in the post-war years two cargo ships which are mainly engaged in Orkney traffic, especially the Orkney livestock trade; and a vehicle carrying ship for the Pentland Firth crossing which has built up a new motor car traffic between Orkney and the mainland of Scotland.

D—AIR SERVICES AND AERODROMES

Trends of Traffic and Modernisation of Air Services

80. The upward trend in air traffic is given by a comparison of 1952 and 1960 traffic through the Ministry of Aviation aerodromes of the Highland area (i.e., all the aerodromes with the exception of Barra).

	<i>Passengers</i>		<i>Freight</i>		<i>Mail</i>	
	1952	1960	1952 tons	1960 tons	1952 tons	1960 tons
Campbeltown (Machrihanish)	7,162	17,817	30	33	22	5
Inverness (Dalcross)	9,456	35,123	18	133	84	126
Wick	10,659	36,277	8	52	53	78
Islay (Port Ellen)	5,194	12,385	34	83	31	43
Tiree	3,768	5,176	9	9	53	3
Benbecula	9,810	18,919	20	115	84	33
Stornoway	10,142	22,583	71	246	56	44
Kirkwall	21,707	33,139	111	228	104	71
Shetland (Sumburgh)	7,719	15,672	56	150	85	69

The above totals embrace both terminal and transit passengers. Point to point carryings by British European Airways on their individual Highland services are given in Appendix VII.

81. The last ten years have seen a steady development in air services in the Highlands and Islands both to meet and to foster demand. There has been a rise in carryings on all services except on the Glasgow-Tiree-Barra run and the comparatively modest increase on that service was only to be expected in view of the comparatively small population of the two islands served. The general increase in air freighting is also notable.

82. The general figures of carryings for 1961 and for the next few years may well show a continuing steep increase since larger aircraft have now replaced the 32 seater Pionair which throughout the fifties was the main aircraft employed on Highland and Island services. In 1961 the Pionair was replaced by the 61 seater Viscount 701 on the Glasgow-Benbecula-Stornoway-Inverness service. In 1962 the Viscount began to operate to Kirkwall and services to Shetland and to Campbeltown and Islay were operated by the new 44 seater Handley Page Dart Herald. (The Glasgow-Tiree-Barra service continues to be operated by the 14 seater Heron.) A proportion of the space on these aircraft on certain runs is, as before, taken up by mail and newspapers but the general effect of this modernisation is approximately to double the seating capacity available for passengers. Air freighting may also be expected to increase because of the much greater freight capacity of the Viscount and the Dart Herald compared with the Pionair.

PART IV FINANCIAL ASPECTS

83. It is generally known that public transport in the Highlands, or at least large sections of it, is uneconomic and we have attempted to set out what financial losses are in fact incurred.

Rail Transport

84. The loss involved in maintaining and operating the Highland railway system, and each of the component lines, has not yet been established though it should be known when the studies at present being undertaken by the British Transport Commission have been completed. British Railways tell us, however, that they are certain that those lines do incur a considerable loss. It would be surprising if it were otherwise, because the railway system as a whole is running at a heavy loss. The White Paper of 1960 on the Reorganisation of the Nationalised Transport Undertakings showed that overall the revenue of the British railway system falls short of its running costs by £60m. a year, apart altogether from the £75m. of interest and central charges that should be met. A later figure for 1961 puts the total at £151m. It seems reasonable to assume that the bulk of this loss falls where the bulk of the railway undertaking lies: and we do not imagine that the loss attributable to the Highland lines can be more than a very small percentage of the total (and it should be kept in mind that the mileage of the Highland lines only represents about 3% of the mileage of the British railway system).

85. It appears to have been recognised that the Highland railway lines, and indeed the whole of the present Scottish railway system have not been profitable since the end of the First World War. We understand that in 1923, when railways in Scotland were apportioned to the L.M.S. and the L.N.E.R., this was done in

order that revenue from the traffic in the south might maintain the Scottish 'peripheral' lines. At a later date, the Scottish Region of British Railways established in 1948 was an administrative, not an economic, unit. Going further back into history, we draw attention again to the financial assistance from the Government given in the 1890's to the completion of the Kyle railway line and in the early 1900's to the building of the Fort William-Mallaig line. This assistance appears to have been given as part of overall government policy at that date for Highland rehabilitation.

86. The value of the peripheral services such as the Highland lines cannot of course be assessed properly by taking them on their own, apart from the main network. An operating loss on the fringes, taken by themselves, may be offset to some extent by the value of traffic which they bring to the rest of the undertaking, and the resulting net loss, in financial terms, may be acceptable to the undertaking as a whole as the cost of providing a comprehensive network of services. The same is true of air services, for example, and in the commercial world many businesses carry on 'unprofitable' branches on this basis. We do not know to what extent, if any, the Highland lines, though unprofitable in themselves, contribute on balance to the health of the trunk railway system.

Road Passenger Transport

87. Our first report considered the economics of bus services in the Highlands and Islands and showed that the bus services operated by Messrs. MacBrayne in the West Highlands and Islands are supported by the annual Government subsidy that the Company receives; and that Highland Omnibuses Ltd., are supported in various ways by the Scottish Bus Group who also forego their interest on capital invested in this undertaking. Within this general situation it appears that the longer distance services (which are our concern here) are still in the main profitable though losing traffic; but it should be noted that some of them do not operate or operate to a very limited extent during the winter months when carryings are lighter.

Sea Services

88. Messrs. MacBrayne receive an annual grant from the Government for their whole undertaking, which includes transport services by sea and road. This grant, distinct from payment for the carriage of mails, amounted to £260,000 in 1961. But while it covers all the Company's activities it is understood that the Company's road haulage services work on commercial terms in competition with other hauliers; and that losses on other road services are estimated to amount to about £38,000. The bulk of the grant is thus for sea services. Government assistance to the Company will have to be considerably increased to cover the annual charges on the new vehicle ferry ships which are to be built by the Government and chartered to the Company at commercial rates but the Company expect that the development of new traffic and the rationalisation of services which the new tonnage may make possible will in time reduce the need for grant. The annual grant to MacBrayne's is paid by the Government on social grounds, because without this help necessary transport services could not be maintained throughout this area at rates which the traffic could bear and if it were not paid, charges for both passenger and freight would have to be increased by about 30%.

89. Under the agreement approved by Parliament in 1961 the Orkney Islands Shipping Company—the new Company set up on local initiative but with Government assistance to provide services from Kirkwall to the North Isles of Orkney—is likely to be subsidised by about £23,000 a year. A small subsidy of £2,200 a year is provided for the steamer service to the North Isles of Shetland operated by the North of Scotland Company.

Air Services

90. During the past ten years British European Airways have incurred an annual operating loss on their Highland and Island services. The Annual Report of British European Airways for 1960/61 reports that the 'social services in the Scottish Highlands and Islands lost some £280,000'. This loss has been borne out of overall profits on the United Kingdom and European services. Although this loss has remained fairly constant over the last ten years, it has fallen in relation to total Highland expenditure from 60% (1951) to 32% (1960) and the reduction has in the main been achieved because air traffic carried on Highland and Island services now shows a 150% increase over 1950/51 and also because of greater efficiency in operations. The figures of loss do not take into account the 'contributory' value to the rest of British European Airways' services of the Highland air services, for to some extent the services between the Highland area and Glasgow and Edinburgh act as feeders to the rest of the Corporation's network of services, and we have explained above that this is a factor that should be borne in mind. Cross-subsidisation is, however, the financial basis on which the Corporation are able to provide the Highland and Island air services, but they say that they expect it to become increasingly difficult for them to make the necessary profits throughout the rest of their services to enable them to carry these unremunerative services.

91. The aerodromes for these Highland and Island services are also unremunerative and the Ministry of Aviation's trading account for 1960/61 shows a deficit of £514,159 for the small aerodromes at Benbecula, Islay, Kirkwall, Machrihanish, Stornoway, Sumburgh, Tiree and Wick. From this list Aberdeen, Inverness and Renfrew are excluded but it is understood that they also operate at a loss. The White Paper of 1961 'Civil Aerodromes and Air Navigational Services'* referring to the aerodromes of the Highland area said:

'They are never likely to pay their way, but they are at present essential to the economy and social welfare of the areas they serve. The Government recognise the importance of these aerodromes, and that there is no scope for transferring their ownership to the local communities. They do, however, form a homogeneous unit for management, and the Government are therefore exploring the possibility of arranging for the management to be carried out by an agent on their behalf. Arrangements will be made for the cost to the Exchequer of subsidising these aerodromes to be separately identified in the national accounts'.

General

92. Not all of the Highland transport services are at present in need of assistance. The sea services to Orkney and Shetland provided by the North of Scotland Company, the cargo service to Stornoway provided by Coast Lines Ltd. and puffer and tramp sea services all operate at present without subsidy.

*Cmd. 1457

93. Road haulage also operates generally without Government assistance. It has now however been obliged to develop in the Highlands beyond limits of profitability. Where other forms of transport can convey freight at cheaper cost to the consignor (coal from Durham to Wick by sea and from Fife to Inverness by rail) road haulage does not enter into competition. The economics of road haulage are of course eased by road improvement; as the roads get better larger vehicles can be used and journeys can be completed in shorter times. To that extent road haulage operators, like other road-users, benefit from Government and local authority expenditure but this of course cannot be regarded as a subsidy to any particular service.

94. Apart from these however it seems broadly true that rail and air services are entirely unremunerative, as are most sea services to the Western Isles, and the sea services to the Northern Isles of Orkney and Shetland. Our earlier report showed that most stage passenger bus services were also either unremunerative or in danger of becoming so. It may be remarked that with the apparent exception of the Coast Lines services to Stornoway and the services of the North of Scotland Company to Orkney and Shetland the regular all-the-year-round scheduled services are losers, and the services that are able to exist without assistance are those that are able to select their traffics and operate only in response to economic demand.

PART V THE FUTURE OF HIGHLAND TRANSPORT

95. The final part of our remit requires us to consider possible methods of securing adequate transport facilities in the Highlands in the future.

Rail Transport

96. The Highland railways are still to a great extent the main permanent transport link with the rest of the country. They provide essential long-distance passenger transport and offer some facilities that bus services have not yet challenged, such as through travel, better terminal facilities, sleeping and dining cars, and more recently car-sleeper services. They help to sustain the tourist industry, particularly by their ability to handle peak load traffic in summer. In the snows and severe weather of the Highland winter they are able to maintain a service on many occasions when road transport is stopped or gravely handicapped. It may indeed be significant that in recent years bus stage services show decreases in carryings while the railways appear to be holding their own. On the goods side the railways are the chief long-distance carriers of coal, liquid fuel and mails and they carry considerable quantities of the general merchandise that goes into the Highland area and of the production, notably the agricultural and fish production, that comes out of it. The West Highland and Ballachulish lines serve the principal heavy industry at present located in the Highland area—the aluminium works at Fort William and Kinlochleven—and industrial development in the Inverness area and elsewhere still depends on rail transport.

97. The position of the railways, however, has been challenged by road transport and to a lesser extent by air transport. The challenge of road transport, especially from privately-owned vehicles and from road haulage with its facility

for door-to-door carriage, has been particularly strong; without doubt it seems to have gained most of the new passenger traffic and is largely responsible for the steep decline in railway freight carryings. Modernisation, faster services, better facilities, more direct connections with the industrial parts of the country, will all improve the railways' competitive position; but other forms of transport are being modernised too and the railways would have to go very far before they began to improve their relative position.

98. Whether the railways can in fact do more than keep up with other forms of transport and go on to regain traffic from road and air, as they must do if they are not to remain unremunerative, is not for us to forecast; it is primarily a matter for the commercial judgment of the railways themselves once they have the essential facts of traffic at their disposal. On present information, however, the critical dilemma that faces them is that they provide services that are essential in present circumstances but are quite unremunerative.

99. The challenge from road and air could be evaded by taking steps to control or curtail road and air transport, and to direct traffic to rail. There is no doubt that rail would find it easy physically to handle all the traffic that moves in the mainland Highlands, at least in the vicinity of the railway network, and there must be a natural reluctance to see the capital already locked up in rail under-used or abandoned at the very time when it is difficult to provide new capital for road and for air. But we do not think control of this kind is a practical solution; and direction of traffic is objectionable on general grounds. The aim should be in any case for the Highlands to share, as far as is practicable, in the modern development of all kinds of transport.

100. Nor do we think it possible to go to the opposite extreme and argue that rail has had its day and that the Highland railways ought to be abandoned. There might be a case for taking this line if it were true that road and air transport had been developed to the extent that they could now provide an adequate substitute for services that are still provided by rail. At present this is not so. We have indicated in paragraph 96 the important and essential services still provided by the railways and if these services were to be cut off without adequate substitute being provided for them, then the Highland economy would be gravely crippled and all hope of Highland development would practically disappear. In particular, if any economic stability is to be provided in the Highlands, particularly if the tourist industry is to be expanded, as is the current hope and expectation, and if industry on any scale is to be attracted to or set up in Highland counties, it appears to us that it would be dangerous in the extreme to abandon the essential long distance links between the Highlands and the industrial transport system of the country as a whole.

101. The fact that the Highland railways are operating at a deficit cannot however be ignored and provided always that essential transport services are maintained—and these need not always be those that are provided by the railways at the moment—it is proper to take all reasonable steps to reduce their losses. In the past economies have mainly taken the form of reducing services or closing little-used stations, but we are advised that not much more remains to be done in that direction. Something may be achieved by the railways concentrating on the traffics that are most profitable to them and ignoring or abandoning the others, and the fact that under the Transport Act the railways will cease to be

common carriers may be of significance in this context; but here again the Highlands would suffer if essential traffics were left without any means of transport, because they were uneconomic for the railways to handle. The real alternatives, for the meantime at any rate, seem to be either the closure of whole railway lines, or acceptance of the fact that they are to be kept running at a loss. If, however, as a matter of policy a decision should be taken to close permanently any one of the Highland railway lines, then we would most strongly recommend that such a step should not be permitted to take place until the corresponding roads in the area affected have been sufficiently improved to enable bus and freight services to operate in safety and with regularity. We would also expect that the substitute passenger service would allow for through bookings and the normal conveniences of civilised travel, that the bus should start from the railway station, and not at a point some distance therefrom, that there should be provision of proper shelter for passengers and their baggage, waiting and booking accommodation along the route, and a satisfactory co-ordination of timetables. These in our opinion are the minimum requirements which should be insisted upon before any passenger closure is sanctioned. Much the same applies to freight services and steps must also be taken to ensure that road haulage facilities are in fact available to convey adequately all essential road traffics and not only the more attractive traffics.

Road Transport

102. Road transport particularly by privately-owned vehicles is developing in the Highlands as elsewhere in the country and has to a quite substantial extent replaced rail transport. The fact that the Highland railway network is comparatively thin, as compared with elsewhere in the country, perhaps gives road an advantage, although fully developed feeder road services to railheads can offset this. By and large also, there are few bulk consignments in the Highlands and in the absence of heavy industry or really large centres of population, goods loads are smaller and train loads or even full wagon loads such as the railways prefer to carry are less common than elsewhere. This may suggest that road haulage, dealing in smaller loads, is better adapted to Highland conditions. In the event while the railways certainly maintain their position as the chief carriers of solid and liquid fuel and of alumina and aluminium, road haulage is now a major means of freight movement. It seems probable that the introduction of vehicle ferries making possible direct road haulage to the Islands will increase this trend and that the railways' role as carriers to and from the railheads at Oban, Mallaig and Kyle of Lochalsh will be still further diminished.

103. But though haulage vehicles and long-distance buses are steadily improving in facilities and performance, the future development of road haulage and of road passenger services and the extent to which they can replace rail depends on further improvement of the main road system. This system is inadequate for present traffic in summer and will become increasingly so in the years ahead, particularly as regards the remaining single width roads that run from the main system to Mallaig, Kyle of Lochalsh and Ullapool and as regards the main approach to the Highlands from the West of Scotland, the Glasgow-Fort William-Inverness road, A82, where it runs along Loch Lomondside. The desirability of improvement is recognised but we record with concern that no early date for construction is contemplated; in particular, the trunk roads to Mallaig and Kyle will not be completely reconstructed until before the mid 1970's. The

approach to Fort William on A82 would also be greatly improved by the construction of a bridge at Ballachulish: this too is recognised as desirable but here likewise no date for construction has yet been set. It cannot be too frequently stated that if the Highland road system is to catch up with the development of road transport, and still more if road transport has to expand to fill the vacuum left by any contraction of rail transport, then substantial capital expenditure is needed on these main roads and at a much higher rate of progress and investment than is contemplated at the moment.

104. We would also draw attention to the fact that at present trunk roads stop short at the mainland shore. If it is accepted that road transport is to develop and particularly if road and ferry are to become the normal means of access to the Outer Hebrides, then it would appear logical and appropriate that certain of the major islands should be included in the trunk road system. We can see no acceptable answer to the proposition that the main roads in these islands should be treated as trunk roads when they serve the same purpose as, say, the road from Garve to Ullapool in Ross-shire.

Sea Services

105. Sea communications are, of course, the major means of freight conveyance to the Outer and Inner Hebrides (Skye excepted) and to Orkney and Shetland: and despite the growth of air travel they are also the principal means of passenger communication with the Islands. They seem likely to remain so. There has been an upward trend in recent years, both as regards freight and passenger conveyance, on MacBrayne's services to the Inner and Outer Hebrides. The increase in passenger traffic (which has taken place despite the increase in air passenger traffic) and particularly the heavy carryings in the summer on the sea services to Orkney and Shetland reflects mainly the development of tourist traffic and should, we think, continue.

106. The immediate development that is likely to take place is the introduction of vehicle ferry services to the Western Isles and the effect of this change could be widespread. It should give an immediate encouragement to all forms of tourist traffic by road, though whether it will take away from the summer tourist traffic that is at present handled by the railways or will simply cater for new additional traffic remains to be seen. But the possibility of sending goods by road to the islands may well mean competition with the present goods services by rail to Oban, Mallaig and Kyle of Lochalsh. It may do more than that. The cheapest means of sending goods to these islands at present is by cargo boat, either from the Clyde or from the east coast. Direct services by road, even if they are more expensive, may by their convenience make road and ferry transport a serious competitor to the cargo service by sea. This is what has happened to a striking extent in Skye, the only one of the islands where road and sea transport have already come into direct competition, and there sea service has suffered. If this pattern is repeated there is at least the possibility that cargo services from the Clyde, and from Aberdeen, may ultimately be replaced by road and ferry services. If this does take place, it may have a striking effect on the pattern of trade. In the past Glasgow and the Clyde area, partly because of the cheaper cargo services by sea, have been the main sources of supply for the islands. If in the future the preferred method of transport is by road and ferry then Inverness, Dingwall, Fort William and Oban may all be in a better position to compete

with the Clyde for the island trade, which it is probably well within their capacity to supply. A ferry link between Ullapool and Stornoway as has been proposed might fit into this new pattern. We do not wish to forecast these matters but we think it proper to draw attention to the possibility of such developments if road haulage does become the principal means of transport to the islands.

Air Services

107. Increasing use is being made of the Highland air services. This is to some extent at the expense of rail, sea and road services but not entirely so, for a good part of the air traffic is recognisably new. They have been described as 'social' services and certainly they are, but they are also already of great value for business purposes, they have increasing value as a means of bringing tourists to and from the islands, and if any real industrial expansion is to take place in the Highlands they will be a necessary link for the industrialist and his contacts and customers outwith the area. Even though to some measure they compete with rail and steamer services they are an essential element in any efficient system of modern transport and it is necessary that they should be maintained.

108. It must be accepted that Highland air services are not commercially profitable and are not likely to be profitable within the foreseeable future unless some radical change takes place in the types of aircraft put into service. What the future of the newer types of conventional aircraft, or of the helicopter, hovercraft or vertical take-off aircraft might be we cannot say, though it is obvious that if these latter could be developed so as to be operated at a reasonable cost they could have a revolutionary effect on Highland transport. Whether economies in operating aircraft and airfields could be made without impairing efficiency or safety, we are not called upon to judge.

Duplication of Services

109. Our remit requires us to have regard to the need to avoid the unnecessary duplication of unremunerative services, and we have considered to what extent there is at present duplication of that kind. Our view is that it is very rare*. Many places and routes are of course served by more than one form of transport, as happens in most places in the rest of the country. This, however, cannot be regarded as duplication for no one of these forms of transport, under present circumstances, is able to replace any other entirely. If the economy of the area is to be safeguarded it seems clear that there will continue to be distinctive places, severally, for rail, road, air and sea services though it is clear that heavy costs and the limited traffic potential of the Highlands mean that many services will continue to require assistance.

Changes in services in the future

110. This is not to say that the need for new services will continue as at present. We believe that the rate of economic progress that will be attained in the High-

*The only apparent example is found on the fringe of the Highland area, on the Clyde where, over part of its route, from Gourrock to Rothesay, MacBrayne's Ardrishaig service does duplicate part of a service provided by the Caledonian Steam Packet Company. But even this is not so simple a case as might at first appear, because on the latter part of the MacBrayne route, from Rothesay to Tighnabruaich, Tarbert (Loch Fyne) and Ardrishaig, the MacBrayne service supplies an essential transport link with Kintyre, Gigha, Islay, Jura and Colonsay.

lands during the remaining decades of this century depends largely on the extent to which transport services and facilities are progressively developed; and that unless the Highlands are provided with adequate modern transport services they will fall further and further behind the rest of the country. This improvement will involve radical changes and we see no probability that it can be carried out without continued assistance. But there is at present no adequate means of ensuring the best value for money spent or that the necessary changes will proceed to a sensible plan taking account of the effects of development in one form of transport upon another. It would be very far from a true picture of the present situation if we suggested that the several operators and providers of transport facilities work in isolation from each other. Nevertheless, some formal means of bringing them together and concerting their plans does seem to be needed to ensure that the inevitable changes in the transport pattern take place in an orderly manner, in the best interests of users and of the Exchequer alike.

Need for a supervisory body

111. In our previous report on Highland bus services we envisaged that it may now be desirable that there should be a body charged with the duty of exercising general oversight of public transport services in the Highlands and of the bearing of developments in one form of transport upon the role of others. We pointed out that as each form of transport develops it cannot but have repercussions on other transport and we added that in a peripheral area like the Highlands with a limited traffic potential, if wasteful expenditure of public money is to be avoided, it would be necessary to have effective arrangements to provide for the co-ordination of all forms of public transport. Similar considerations have, of course, been advanced on other occasions such as the earlier suggestion made by the Scottish Transport Council that a transport authority should be set up for the whole of Scotland. This suggestion did not commend itself to the Government and the transport policy that is being evolved for the country as a whole is on different lines. We do not think, however, that this is an argument against the setting up of the kind of body that we have in mind to deal with Highland transport. Highland circumstances are widely recognised to be different from those in the rest of the country and to require and justify treatment on their own. Our further consideration of their transport problems certainly confirms us in our earlier view that special measures are necessary to ensure the supervision of the development of Highland transport.

112. The extent to which public money in one form or another is already involved in all forms of Highland transport, and is likely to continue to be involved, is in itself a sufficient justification for supervision to see that it is spent to the best advantage among competing transport interests and for the appointment of one body which can assess and adjust the claims and priorities of each. So far as we can see, heavy assistance, direct or indirect, is likely to be demanded by each of the competing forms of transport and without supervision the situation may be approaching when heavier assistance to 'A', making possible 'A's' modernisation and subsidised success, will require in turn heavier subsidies to 'A's' competitor 'B' to keep him in being. Such a process could easily get out of hand. One of the principal functions of the body we have in mind is to be found in advising the Government as to the manner and extent to which financial assistance, where necessary, should be applied.

Functions proposed

113. As we see it, the main functions of the new body would be to advise the Government on:

- (1) The general level of transport services, of all kinds, that are necessary to provide an adequate modern transport system in the Highlands.
- (2) Public capital investment and priorities of investment in the various forms of transport including capital expenditure on rail, air, sea and road services and on their ancillaries such as roads, ferries, piers and aerodromes.
- (3) Any operating assistance given to rail, air, sea and bus services.

114. These are in addition to the functions which we suggested in our first report should be exercised in relation to Highland bus services. We wish to make it clear that the new body would not be charged with the executive functions of supplying, or operating, transport services; these are matters that should be left to the agencies who provide such services. It is assumed that where private enterprise is prepared to provide a service, without assistance, it should continue to be allowed to do so, subject to obtaining any necessary licences as at present. The functions of the Licensing Authority (for road haulage vehicles), the Traffic Commissioners (for road passenger services) and of the Air Transport Licensing Board would remain substantially unaffected by our proposals. We see no reason why the new body we propose should not be able to work in conjunction with these bodies. That this division of functions is a practicable one is shown by the MacBrayne arrangements, where the Secretary of State's general control of the Company's activities is subject, in the case of road passenger transport, to the Company's obtaining any necessary licences from the Traffic Commissioners.

115. We realise that the forms of public investment or support, given at present to the various branches of public transport, may vary. In some cases they appear as grants or as other forms of direct expenditure on the Votes of the responsible Departments. The White Paper on the Financial and Economic Obligations of the Nationalised Industries (Cmd. 1337) on the other hand indicates that each nationalised industry will be set a target of profitability, and if it is required to undertake uneconomic activities it will be entitled to ask for an adjustment of its target accordingly. This principle was further clarified during the debate on the Transport Bill in the context of uneconomic rail services (Hansard, 21st November, 1961, col. 1275). We are in favour of bringing all forms of subsidy into the open so that decisions about how money should best be spent may be taken openly, but so far as our present purposes are concerned the difference between these two methods of assistance is irrelevant. The functions of the new body we propose could be discharged either by advising on the amount of direct grant that should be given or the amount of direct expenditure that should be incurred or on the degree to which a nationalised industry's commercial target should be adjusted. We would also point out that assistance of the kind and on the terms we suggest is not to be regarded as a breach of the principle that nationalised industries should conduct their affairs on a commercial basis; what we suggest is rather a method whereby the Government can be helped to assess how much they should pay for services that they may judge to be necessary in the public interest but are found to be un-remunerative. Putting it another way, we would regard the industry or operator concerned as being asked or required to provide services, in effect on commercial terms up to the price at which the

Government, with whom the final decision in these matters must rest, thinks it necessary and possible to pay for them.

Transport charges

116. Our remit did not require us to consider the subject of transport charges, but charges policy is obviously relevant to any question of assistance since without some control an operator in receipt of subsidy might either reduce his charges too low and thus eliminate fair competition, or increase them too high and nullify the purpose of assistance. We have not considered this point in detail, but clearly some cognisance of charges would have to be taken into account in advising on the amount of assistance that needs be given to any individual operator. The general considerations which the new body would require to keep in mind are those suggested by the provision in the agreements with David MacBrayne Ltd. and the Orkney Isles Shipping Company whereby the Secretary of State is required to consider in relation to the charges made by these Companies (i) the general level of other transport charges, (ii) the financial results of the Companies' activities and the amount of grant payable to the Companies, and (iii) the effect on the economy of the area served.

117. These functions could only be discharged by a permanent body well acquainted with the Highland economy and with understanding of the realities of transport operation in the area and with an adequate staff to enable it to discharge its duties effectively. Neither the Scottish Transport Council, nor the Advisory Panel on the Highlands and Islands, as at present constituted, could undertake these responsibilities; and its scope would have to be much wider than that of the Scottish Transport Users Consultative Committee. The Scottish Transport Council is only concerned with suppliers of nationalised, or Government-assisted, transport, and is not concerned with the road programme. The Highlands Panel has a very general remit which embraces all aspects of the economic and social development of the area. The Scottish Transport Users Consultative Committee has closely defined duties under statute relating only to B.T.C. services. Some of the functions we have in mind are akin (as we have already indicated) to those at present discharged by the Traffic Commissioners and the Licensing Authority but the functions of the body we propose go far beyond their scope. We can however point to the close co-operation during the past 15 years between the Secretary of State and his Departments and the Advisory Panel on the Highlands and Islands as evidence that co-operation between an independent body and the Executive in such matters can work well and further the public interest. To what extent the new body should work within and to what extent it should work outwith public attention requires careful thought. Forward planning may have to be conducted in strict confidence, but since withdrawals of unremunerative transport services are, in the Highlands, matters vitally affecting the welfare of communities, there is much to be said for the new body holding enquiries in public into proposals by individual operators for withdrawals of services. We are aware that we are here recommending the creation of an additional organisation in the Highlands but we are doing this to meet a special need and it should be for consideration also whether this body could take over in the Highlands transport duties at present undertaken by other bodies.

Departmental responsibility

118. There remains the question—to whom should the new body we envisage be responsible? Responsibility for the British Transport Commission and the Licensing of road haulage services and of road passenger services rests with the Minister of Transport, responsibility for British European Airways and aerodrome operation rests with the Minister of Aviation. MacBrayne's transport services by sea and road and Highland shipping services generally are the concern of the Secretary of State for Scotland who is likewise responsible for trunk roads and for assistance to classified roads, piers and ferries in the area. The Secretary of State has also a general concern in transport provision, whether or not the ultimate responsibility of another Minister, in so far as it affects the economy and welfare of Scotland.

119. Our conclusion is that on practical considerations alone, effective transport planning and the control of financial assistance would be made easier if the task of administering assistance to Highland transport services and facilities were concentrated on the Secretary of State for Scotland, and if the new body were required to report to him, rather than to a number of Ministers. We would assume that the Secretary of State would, in any event, have to maintain close links with the Ministers of Transport and Aviation for these purposes. But over and above these practical considerations we would emphasise that the Highland transport system must be viewed as one and that the economy of the area is built round it. Since the Secretary of State for Scotland has a general concern for the Highland economy it seems to us to follow that he should be the Minister with the final say about transport provision. With the Secretary of State primarily responsible for arterial transport and communications to and in the Highlands, and at the same time acting in consultation with the Ministers of Transport and Aviation and assisted by such a body as we recommend with a clear remit to supervise the general pattern of public transport in the area and to make recommendations on its own initiative, a rational and efficient solution to the Highland transport problem should be attainable.

120. Our main conclusions may be summarised:—

- (i) The position of the railways has been challenged by road transport and to a lesser extent by air transport (paragraph 97) but important and essential services are still provided by rail (paragraphs 96 and 100) and no line should be closed until adequate substitute services by road are provided (paragraph 101).
- (ii) Road transport has increased (paragraph 102) but future development depends on the improvement of the main road system (paragraph 103). Certain of the major islands should be included in the trunk road system (paragraph 104).
- (iii) Sea services seem likely to remain the principal means of passenger and freight conveyance to the islands (paragraph 105), though the development of vehicle ferries is likely to bring about changes in the pattern of transport and trade (paragraph 106).
- (iv) Increasing use is being made of air services and they are an essential part of the transport system (paragraph 107).
- (v) Duplication of unremunerative services is rare, and it seems clear that there will continue to be distinctive places, severally, for rail, road, sea and

air services: and it is likely that many will continue to require assistance (paragraph 109).

(vi) The need for transport services may not continue as at present and progressive development may involve radical changes. But means are needed to ensure that changes take place in an orderly manner, in the best interest of users and of the Exchequer (paragraph 110).

(vii) We therefore recommend the setting up of a permanent body charged with supervision of the development of Highland transport (paragraph 111) and with the duty of advising the Government as to the manner and extent to which financial assistance should be applied (paragraph 112). This body should be responsible to the Secretary of State for Scotland (paragraph 119).

121. We wish to express our high sense of appreciation of the very ample assistance we have received at all times from the members of the Working Party. They have furnished us with much information and advice and have spared no efforts to provide us with material and answers to the many questions that we have found it necessary to put to them. Finally we wish to acknowledge the most valuable services rendered to us throughout the course of the Enquiry and the preparation of this report by the Joint Secretaries, Mr. M. M. Stuart of the Scottish Transport Council and Mr. J. S. Gibson of the Department of Agriculture and Fisheries for Scotland and, until October, 1961, Secretary of the Highlands and Islands Advisory Panel.

John Cameron
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APPENDIX I

MEMBERSHIP OF THE HIGHLAND TRANSPORT ENQUIRY

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The Hon. Lord Kilbrandon

Robert Taylor, Esq.

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J. L. Warrender, Esq., Senior Scottish Officer, Ministry of Power.

APPENDIX II

FREIGHT CARRYINGS OF THE HIGHLAND RAILWAY LINES

A—Perth-Inverness Line

1. During the year 1959 the undernoted traffic, received at or forwarded from, stations on both routes between Perth and Inverness, was carried by the railway:—

	<i>Tons</i>
<i>Freight</i> 202,976 tons made up of	90,000 coal
	10,920 timber
	6,300 potatoes
	5,390 whisky
	1,700 grain
	10,000 malt and barley
	5,000 bitumen and tar
	73,666 general merchandise
	202,976

Only the coal and general merchandise are transported with any degree of regularity, approximately 525 tons per day; the remaining traffics are largely seasonal.

Parcels 613,000 parcels were carried over the railway, an average of 1,965 per day.

Mails The carriage of Post Office letter and parcel mail bags is a regular feature of the railway service and about 872,000 bags were conveyed, approximately 2,795 per day.

Livestock During the seasonal movement of livestock 80,386 animals were transported.

2. In addition to the above traffic the undernoted tonnage was carried over the section to and from locations North and West of Inverness:—

	<i>Tons</i>
<i>Freight</i> 185,000 tons made up of	68,430 coal
	8,977 timber
	1,274 grain
	8,868 potatoes
	8,511 bitumen
	4,251 whisky
	1,185 scrap
	2,773 cement
	80,731 general merchandise
	185,000

Parcels 714,000

Mails 742,000 bags

Livestock 160,000 head

Fish 2,623 tons

APPENDIX II (Contd.)

B—Inverness-Wick/Thurso

During the 12 months ended December 1959 the railway transported the under-noted traffics:—

	Tons
<i>Freight</i> 171,000 tons comprising	64,787 coal
	8,511 bitumen
	8,868 potatoes
	5,931 timber
	4,251 whisky
	1,274 grain
	1,185 scrap
	76,193 agricultural and fishing requisites and general goods
	171,000

Potatoes, whisky and grain are seasonal traffics and cannot therefore be assessed for transport purposes on a daily basis. The other traffics, however, are fairly regular and the railway requires to provide transport for approximately 500 tons per day.

Parcels 458,000 parcels, an average of 1,500 per day were transported over the railway during the period.

Mails The conveyance of Post Office mails is a regular feature of rail transport and during the year 1959 about 514,000 bags were carried, an average of approximately 1,600 per day.

Livestock 163,000 head of livestock were carried over the railway during the seasonal movements.

During the heavy Spring and Autumn livestock periods special trains are run southwards from Thurso, Forsinard, Lairg and Dingwall. During four days sales at the beginning of August Thurso dispatched 177 trucks of lambs while in the middle of the same month 112 trucks of lambs were dispatched in one day from Lairg. As many as 81 trucks of cattle were sent forward from Dingwall during one day in the month of March.

Fish Fish landed at Wick, Scrabster and Helmsdale and forwarded by rail during the period under review totalled 2,323 tons viz.

	Tons
Wick	1,413
Thurso (for Scrabster)	900
Helmsdale	10
	2,323

Included in the above summary of traffics are the figures relative to rail-borne traffics passing through Thurso Station en route to and from the Orkney Islands via Scrabster Harbour, viz. 375 tons freight, 7,728 parcels and 53,040 bags of mail.

APPENDIX II (Contd.)

C—Inverness-Kyle of Lochalsh Line

1. During the year 1959 the undernoted traffic was carried over the railway:—

<i>Freight</i>	17,000 tons made up of 3,643 tons of coal from Scottish pits
	3,126 tons of timber and pitprops to Scottish destinations
	10,231 tons of general merchandise
	17,000

The movement of freight train traffic does not fluctuate to any appreciable extent and it would be true to say that the railway transports on the average between 50 and 60 tons of this type of traffic per day.

Parcels 335,000 parcels were carried over the railway during the period and as these are fairly regular in their flow an average of 1,073 parcels per day truly reflects the position.

Mails Letter and parcels mails are regularly carried over the railway and in 1959, 311,000 bags were transported, an average of approximately 1,000 bags per day.

Milk The conveyance of 378,000 gallons of milk, 83 % for Stornoway, was undertaken by the railway in the period under review but as this is a fluctuating traffic depending on the season of the year a daily average figure would be misleading.

Livestock 70,000 head of livestock were transported during the seasonal movements.

Fish Approximately 300 tons of fish were landed at Kyle of Lochalsh all of which were despatched by rail.

2. Included in the above figures are those relative to railborne traffic passing through the port of Kyle of Lochalsh to and from Stornoway, viz. 4,424 tons of freight and parcels, 81,380 bags of mail, 313,490 gallons milk and 23,510 head of livestock.

D—Dunblane-Oban/Ballachulish Line

1. During the year 1959 the undernoted traffics exclusive of shipment items were carried by the railway over the Dunblane to Oban line and the Killin and Ballachulish Branches:—

(a) <i>Freight</i>	78,000 tons made up of	28,859 tons of coal and coke
		16,836 tons of alumina
		9,346 tons of oil
		1,359 tons of barley and malt
		1,000 tons of chloridex
		1,031 tons of timber
		1,528 tons of carbon blocks
		894 tons of cement
		848 tons of fertilisers
		16,299 tons of general merchandise
		78,000

APPENDIX II (Contd.)

Coal, coke, alumina, oil and general merchandise are fairly regular in movement and on the average the railway transports 230 tons of such commodities each day. A supply of bulk alumina vans is specially provided by the railway for the conveyance of alumina from Burntisland to Ballachulish for the British Aluminium Co.'s works at Kinlochleven.

(b) *Parcels* 124,000 parcels, an average of 397 parcels per day.

(c) *Mails* 178,000 bags of Post Office letter and parcels mails, an average of 570 bags per day.

(d) *Livestock* During the seasonal movement of livestock in 1959, 56,000 animals were transported. Of that number almost 43,000 head were forwarded by rail from Oban, most of the animals having originated in the Islands and passed through the Livestock market at Oban.

(e) *Fish* 1,700 tons of fish were sent forward by rail from Oban.

2. In addition to the foregoing the undernoted traffics were carried by rail via Oban en route to and/or from the Islands by steamer:—11,314 tons freight, 36,000 parcels, 27,000 bags of mail.

E—Craigendoran-Fort William-Mallaig Line

1. The area served is sparsely populated and apart from Fort William and Mallaig the communities are small; nevertheless the railway caters for a number of industries and the undernoted traffic was carried during the year 1959:—

<i>Freight</i> 193,000 tons made up of—	31,000 tons of coal from Scottish pits
	30,000 tons of alumina, Burntisland to Fort William
	8,000 tons of petroleum coke, Grange-mouth to Fort William
	16,000 tons of aluminium, Fort William to various destinations
	49,000 tons of scrap metal, Faslane to various destinations
	3,000 tons of pitwood to Scottish pits
	10,000 tons of oil and spirit, Grange-mouth and Bowling to Fort William
	46,000 tons of general merchandise
	<hr/> 193,000 tons <hr/>

On the average 147 tons of general merchandise is transported daily. The commodities transported in bulk do not move on a daily basis but spasmodically, in quantity. The only exception to this is the alumina which is carried to Fort William at the rate of approximately 100 tons per day.

Parcels About 104,000 parcels are carried to and from stations on the West Highland line each year and since such traffic is fairly regular an average figure of 330 parcels per day would be a fair estimate of the position.

Fish Some 7,000 tons of fish were transported during the year 1959 but a daily average figure would not reflect the true position. It will be appreciated that fish landings at Mallaig depend on the season and are heavier in the winter period than they are during the rest of the year. Of the 7,000 tons

APPENDIX II (Contd.)

carried by rail 5,135 tons were conveyed in the period between November and January.

Mails Post Office mails are a regular daily traffic carried over the railway and during the year 1959, 93,668 bags were conveyed, an average of 300 bags per day.

Livestock 26,000 head of livestock were transported in 1959 during the seasonal movements.

2. Included in these figures are those in respect of Stornoway traffic passing via Mallaig (including fish traffic from Stornoway) viz.

<i>General Merchandise</i>	Rail traffic for Stornoway shipped at Mallaig
	779 tons
	7 cattle
	112 sheep
Traffic from Stornoway discharged at Mallaig for rail conveyance	378 tons

Parcels and Miscellaneous Consignments by Passenger Train

Forwarded to Stornoway	21 tons (or 630 pcls.)
Received from Stornoway	132 tons (or 3,960 pcls.)

Post Office Mails Traffic The average dispatch of mails by boat from Mallaig to Stornoway is approximately 20 tons or about 600 bags per month. No mails are received from Stornoway for dispatch by rail from Mallaig.

APPENDIX III

THE HIGHLAND TRUNK ROADS

Existing Carriageway							
Route	Section	Length (Miles)	Width (ft.)	Align- ment	Approx. Traffic Capacity P.C.U.s.	Actual 1961 Traffic P.C.U.s.	Degree of overloading or underloading
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A.9	Perth-South of Dunkeld	10	2 Lane Narrow	Fair	4,600	4,550	At capacity
	S. of Dunkeld-Blair Atholl	23	2 Lane Narrow	Fair	4,600	4,110	10 % under capacity
	Blair Atholl-Inverness	80	18'	Good	4,200	2,640	35 % under capacity
	Inverness-Dingwall	22	2 Lane Narrow	Fair	4,600	5,590	20 % overloaded
	Dingwall-Evanton	8	2 Lane Narrow	Fair	4,200	4,510	10 % overloaded
	Evanton-Brora	44	18'	Fair	4,000	1,640	60 % under capacity
A.9/ A.882	Brora-Wick-Thurso	70	16'-18'	Fair	4,000	1,080	70 % under capacity
A.82	Balloch-South of Luss	5	2 Lane Narrow	Fair	4,600	5,880	30 % overloaded
	South of Luss-Tarbet	12	16'-18'	Poor	4,000	4,470	10 % overloaded
	Tarbet-Crianlarich	17	15'-18'	Poor	4,000	2,260	40 % under capacity
	Crianlarich-Tyndrum	5	2 Lane Narrow	Poor	4,000	3,540	10 % under capacity
	Tyndrum-Ballachulish	37	18'	Good	4,200	2,060	50 % under capacity
	N. Ballachulish-Ft. William	13	18'	Good	4,200	3,250	25 % under capacity
	Ft. William-Spean Bridge	10	18'	Good	4,200	3,320	25 % under capacity
	Spean Bridge-Invergarry	15	18'	Good	4,200	1,960	55 % under capacity

APPENDIX III (Contd.)

Existing Carriageway

Route	Section	Length (Miles)	Width (ft.)	Align- ment	Approx. Traffic Capacity P.C.Us.	Actual 1961 Traffic P.C.Us.	Degree of overloading or underloading
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A.84/ 85	Stirling-Doune	8	2 Lane Narrow	Good	5,000	4,690	near capacity
	Doune-Callander	8	2 Lane Narrow	Fair	4,600	3,490	25 % under capacity
	Callander-Lix Toll	18	2 Lane	Poor	4,000	2,870	30 % under capacity
	Lix Toll- Criankarich	11	2 Lane	Poor	4,000	2,340	40 % under capacity
	Tyndrum-Dalmally	13	18'	Good	4,200	1,880	55 % under capacity
	Dalmally-Connel Bridge	19	18'	Good	4,200	2,710	35 % under capacity
	Connel Bridge- Oban	5	18'	Good	4,200	4,820	15 % overloaded
A.832/ 834	Dingwall-Garve	13	2 Lane Narrow	Poor	4,000	1,770	55 % under capacity
A.835	Garve-Ullapool	32	$\frac{3}{4}$ single C/way	Poor	600	920	Single: 50 % overloaded
			$\frac{1}{4}$ 18'	Good	4,200	920	18': 75 % under capacity
A.87	Invergarry- Kyle of Lochalsh	51	Mostly Single C/way	Poor	600	1,130	Single: nearly 100 % over- loaded. 18': 70 % under capacity.
A.830	Ft. William- Corpach	3	18'	Fair	4,200	3,720	10 % under capacity
	Corpach-Mallaig	43	Mostly Single C/way	Poor	600	700	Single: some- what overloaded. 18': 80 % under capacity.
A.828	Connel-Ballachulish	31	16'-18'	Poor	3,800	1,190	70 % under capacity

APPENDIX III (Contd.)

Existing Carriageway

Route (1)	Section (2)	Length (Miles) (3)	Width (ft.) (4)	Align- ment (5)	Approx. Traffic Capacity P.C.Us. (6)	Actual 1961 Traffic P.C.Us. (7)	Degree of overloading or underloading (8)
A.83	Tarbet-Junction with A.815	13	18'	Poor	4,000	34,000	15 % under capacity
	Junction with A.815-Inveraray	11	18'	Good	4,200	2,120	50 % under capacity
	Inveraray- Lochgilthead	25	18'	Good	4,200	1,680	60 % under capacity
A.816	Lochgilthead-Oban	37	16'-18'	Poor	3,800	1,340	65 % under capacity
A.832/ 890	Garvo-Achnasheen (non-trunk)	16	Single C/way	Poor	600	1,000*	Over 50 % over- loaded.
	Achnasheen- Auchtertyre (non-trunk)	31	Single C/way	Poor	600	750*	25 % overloaded

* 1961 Traffic P.C.U.'s assumed as no census taken since 1954.

APPENDIX IV

ROAD GOODS TRANSPORT IN THE HIGHLANDS AND ISLANDS

Number of operators and number of A and B licence vehicles (incl. B.T.C. and B.R. vehicles) from 'Transport in the Highlands and Islands' by W. I. Skewis, B.Sc., Ph.D.

Area 1958		On A lic.	On B lic.	A and B lic.	Av. fleet			Av. vehicle weight			Vehicles per 1,000 pop.
					A.	B.	all	A.	B.	all	
Easter Inverness and Easter Ross	Ops.	40	107	147							
	Veh.	177	202	379	4.43	1.9	2.6	3.4	2.8	3.1	4.6
	Tons	604½	574½	1,179							
Wester Ross and Lochaber	Ops.	5	48	53							
	Veh.	8	87	95	1.6	1.8	1.8	2.8	2.7	2.7	8.6
	Tons	22½	236½	259½							
Sutherland	Ops.	6	44	50							
	Veh.	17	82	99	2.8	1.9	2.0	3.7	2.7	3.1	7.6
	Tons	62½	244½	307							
Caithness	Ops.	14	52	66							
	Veh.	29	91	120	2.0	1.7	1.8	3.0	2.6	2.7	4.8
	Tons	86½	240½	326½							
Outer Islands	Ops.	4	211	215							
	Veh.	20	299	319	5.0	1.4	1.5	2.8	2.3	2.3	9.4
	Tons	55½	690½	746							
Inner Islands	Ops.	11	76	87							
	Veh.	15	122	137	1.4	1.6	1.6	2.5	2.5	2.5	8.6
	Tons	37½	305½	343							
Southern (Perthshire, Bute, Argyll)	Ops.	60	185	245							
	Veh.	177	340	517	3.0	1.8	2.1	3.3	2.6	2.9	3.7
	Tons	580½	899½	1,480½							
Highlands and Islands	Ops.	140	723	863							
	Veh.	443	1,223	1,666	3.2	1.7	1.9	3.3	2.6	2.8	5.2
	Tons	1,149	3,192	4,641							

LONG DISTANCE BUS SERVICES IN THE HIGHLANDS

(A) Scottish Bus Group

Service and Operating Company	Period of Operation	Daily Frequency			Capacity	Carryings Average Daily During 1960	Journey Time
		M/F	Sat.	Sun.			
(1) SCOTTISH OMNIBUSES LTD.							
(a) Edinburgh-Inverness (Day Service)	Mid June to Mid Sept.	1	1	1	Unlimited	71	8 hrs. 15 mins.
(b) Edinburgh-Inverness (Night Service)	Do. do.	Three Journeys per week			Unlimited	80	7 hrs. 10 mins.
(2) HIGHLAND OMNIBUSES LTD.							
(a) Inverness-Thurso (Express Service)	Mid June to Mid Sept.	Three Journeys per week			Unlimited	95	6 hrs. 20 mins.
(b) Inverness-Thurso (Stage Connecting Service)	Do. do. Mid. Sept. to Mid June	2 1	2 1	— —	Unlimited	—	9 hrs. 30 mins. to 10 hrs. 30 mins.
(c) Inverness-Helmsdale	January to December	4	5	—	Unlimited	—	5 hours. 34 mins.
(d) Inverness-Dornoch	Do. do.	6	6	—	Unlimited	—	3 hrs. 38 mins.
(e) Inverness-Fort William	Do. do.	2	2	2	Unlimited	150	2 hrs. 45 mins.
(3) W. ALEXANDER & SONS LTD.							
(a) Glasgow-Inverness (Day Service)	Mid June to Mid Sept.	1	1	1	Unlimited	334	8 hrs. 2 mins.
(b) Glasgow-Inverness (Night Service)	Do. do.	Three Journeys per week			Unlimited	173	6 hrs. 55 mins.
(c) Glasgow-Oban	January to December	2	2	2	Unlimited	359	4 hrs. 36 mins.

Carryings are derived from Route Figures and include Intermediate Traffic

APPENDIX V (Contd.)

(B) David MacBrayne Ltd.

Service	Period of Operation	Frequency	Capacity	Carryings Average		Summer Peak	Journey Times
				Summer June/Sept.	Winter		
Glasgow-Fort William	Oct. to March Saturdays and Sundays only	1 Journey in one direction each day	Unlimited	—	26		5 hours
	April to Sept. Daily	M/F 1 return journey daily Saturday 1 journey to Fort William 2 journeys to Glasgow Sunday 2 journeys to Fort William 1 journey to Glasgow	"	112	—	386	
Fort William-Inverness	January to December Monday to Saturday	2 return journeys daily	"	255	166	299	2 hrs. 45 mins.
Fort William-Tyndrum	January to December Daily	1 return journey daily	"	97	74	111	2 hrs. 45 mins.
Glasgow-Tarbert-Campbeltown	January to December Daily	1 return journey to Campbeltown daily	"	578	390	1,710	5 hrs. 45 mins.
		1 return journey to Tarbert daily					4 hrs. 20 mins.
Kyle-Inverness	October to May	Saturdays only 1 return journey	"	—	44		3 hrs. 35 mins.
	June to September	Tuesdays and Saturdays 1 return journey each day	"	58	—	73	

APPENDIX VI

A. SEA SERVICE CARRYINGS OF DAVID MACBRAYNE LTD.

COMPARISON OF STEAMER CARRYINGS FOR THE YEARS 1952 AND 1960

(1) Passengers

Service	Yearly Total		Summer		Winter		Average per Day				Maximum Daily Carrying
							Summer		Winter		
	1952	1960	1952	1960	1952	1960	1952	1960	1952	1960	
Ardaraig Mail Service	209,816	114,772	120,096	71,877	89,720	42,895	1,149	711	439	205	1,660
Islay Mail Service	31,000	33,642	16,672	22,753	12,328	10,889	177	225	60	52	1,229
Mull Mail Service	39,216	49,326	21,296	26,007	17,940	23,319	203	254	86	111	771
Inner Islands Mail Service	16,361	29,677	10,571	19,452	5,790	10,225	176	388	56	98	1,245
Outer Islands Mail Service	18,526	14,703	12,209	10,286	6,317	4,417	230	204	61	42	345
Portree Mail Service	51,637	26,907	33,674	20,913	17,963	5,994	321	209	86	29	545
Stornoway Mail Service	43,700	74,071	24,283	44,498	19,417	29,573	231	445	93	141	1,292
Staffa and Jona Service	36,224	60,159	36,224	60,159	—	—	416	654	—	—	2,219
Oban Excursion Service	41,701	51,716	41,701	51,716	—	—	483	517	—	—	1,340
Lismore Service	8,194	7,803	4,724	5,053	3,470	2,750	36	38	18	15	59
Mingary Service	4,639	6,302	4,157	5,853	482	449	33	45	2	2	82
Loch Shield Service*	4,152	7,449	3,697	5,160	435	289	28	54	2	2	96
Loch Tossalg Service†	2,905	3,009	2,197	2,166	708	843	16	16	4	4	20
Stornoway Cargo Service	13	34	13	26	—	8	—	—	—	—	—
Islay Cargo Service	—	—	—	—	—	—	—	—	—	—	—
Outer Islands Cargo Service	328	418	305	219	23	199	—	—	—	—	—
Special Steamers, Charters etc.	650	371	650	365	—	6	—	—	—	—	—
	509,082	480,359	334,469	348,503	174,613	131,856	3,469	3,760	897	701	10,973

* Loch Shield Service—Year 1954 taken as service was not in operation in 1952.

† Loch Tossalg Service—Year 1957 taken as service was not in operation in 1952.

APPENDIX VI (Contd.)

(2) Goods and Livestock

Service	Goods tons (Including Cars)		Motor Cars						Livestock							
			Yearly Total		Summer		Winter		Cattle		Sheep		Horses		Pigs	
	1952	1960	1952	1960	1952	1960	1952	1960	1952	1960	1952	1960	1952	1960	1952	1960
Ardaraig Mail Service	1,204	799	—	—	—	—	—	—	—	270	6	—	—	—	—	—
Islay Mail Service	3,882	4,576	944	1,929	617	1,402	327	527	533	593	2,737	5,292	18	7	259	159
Mull Mail Service	4,142	3,306	716	1,212	483	997	231	215	737	1,000	6,084	4,016	43	7	77	7
Inner Islands Mail Service	3,647	5,446	408	1,349	259	985	149	364	394	405	2,612	2,103	45	37	230	3
Outer Islands Mail Service	3,252	3,188	296	591	198	378	98	213	379	335	1,985	3,244	27	26	13	—
Portree Mail Service	4,407	361	229	48	200	37	29	11	531	73	4,947	1,317	29	—	74	—
Stornoway Mail Service	9,601	11,976	790	3,383	525	2,546	255	837	907	2,016	11,382	20,357	46	18	21	161
Staffs & Isles Service	51	70	—	—	—	—	—	—	—	—	311	—	—	—	—	—
Oban Excursion Service	17	526	—	285	—	285	—	—	48	22	3,450	44	—	1	—	—
Lismore Service	89	65	—	—	—	—	—	—	—	—	17	14	—	—	—	—
Mingary Service	114	93	—	—	—	—	—	—	—	8	30	133	—	—	—	—
Loch Shiel Service*	191	112	—	—	—	—	—	—	2	10	118	221	—	—	—	—
Loch Toscaig Service†	72	72	—	—	—	—	—	—	27	27	17	—	—	—	—	—
Stornoway Cargo Service	19,316	22,281	35	30	16	10	19	20	282	131	—	—	1	—	—	—
Islay Cargo Service	12,503	16,124	25	14	12	4	13	10	1,897	1,528	5,730	5,870	48	32	269	30
Outer Islands Cargo Service	20,298	22,305	106	177	62	72	44	105	2,940	4,485	22,749	26,438	45	9	160	8
Special Steamers, Charters etc.	132	562	2	8	2	2	—	6	4,648	5,661	15,129	22,559	30	14	5	—
	82,918	91,462	3,541	9,026	2,374	6,718	1,167	2,308	13,333	14,294	77,568	91,594	332	151	1,208	368

* Loch Shiel Service—Year 1954 taken as service was not in operation in 1952.

† Loch Toscaig Service—Year 1957 taken as service was not in operation in 1952.

APPENDIX VI (Contd.)

*B. THE CALEDONIAN STEAM PACKET COMPANY
LIMITED*

KYLE/KYLEAKIN FERRY SERVICE—CARRYINGS

<i>Year</i>	<i>No. of Passengers</i>	<i>No. of Private Cars</i>	<i>No. of Commercial Vehicles</i>	<i>Total Vehicles</i>
1951	107,693			19,415
1952	113,542			23,242
1953	112,888			25,158
1954	125,469			29,951
1955	135,730			39,100
1956	151,547			48,846
1957	155,807	45,002	5,629	50,631
1958	177,967	57,486	6,458	63,944
1959	224,021	64,604	9,002	73,606
1960	214,352	68,014	10,614	78,628
1961	224,208	74,355	10,464	84,819

APPENDIX VII

CARRYINGS OF THE HIGHLAND AND ISLAND
AIR SERVICES OF BRITISH EUROPEAN AIRWAYS*A—Passenger Traffic*

(Financial Year/April—March)

		1952/1953	1959/1960	1960/1961
GLASGOW				
Campbeltown	Out	2,643	2,256	2,491
	In	2,680	2,370	2,685
Islay	Out	2,249	4,085	4,368
	In	2,481	4,214	4,563
Tiree	Out	816	1,387	1,490
	In	876	1,405	1,530
Barra	Out	362	732	953
	In	317	710	943
Benbecula	Out	1,610	2,979	3,265
	In	1,581	3,092	3,625
Stornoway	Out	2,318	3,828	4,295
	In	2,160	3,831	4,647
Inverness	Out	219	2,197	2,360
	In	284	2,059	2,066
Wick	Out	421	1,940	2,028
	In	384	2,023	2,178
Orkney	Out	843	1,229	1,407
	In	872	1,194	1,265
Shetland	Out	837	926	1,040
	In	749	819	964
ABERDEEN				
Wick	Out	1,172	1,850	2,027
	In	1,119	1,742	1,911
Orkney	Out	3,752	4,412	4,753
	In	3,751	4,773	5,179
Shetland	Out	1,656	3,276	3,649
	In	1,558	3,620	3,925

APPENDIX VII (Contd.)

A—Passenger Traffic (Contd.)

		1952/1953	1959/1960	1960/1961
EDINBURGH				
Wick	Out	1	1,032	1,134
	In	62	1,003	1,127
Orkney	Out	530	1,224	1,285
	In	588	1,129	1,239
Shetland	Out	6	501	444
	In	216	595	593
INVERNESS				
Benbecula	Out	413	970	1,151
	In	402	1,022	955
Stornoway	Out	2,136	4,245	4,958
	In	1,780	3,972	4,698
Wick	Out	315	772	815
	In	395	503	516
Orkney	Out	1,005	980	985
	In	1,051	977	984
Shetland	Out	261	425	483
	In	254	417	490

APPENDIX VII (Contd.)

B—Freight, Mail and Newspaper Traffic

(Financial Year/April—March)

Weight expressed in Kilograms

		1952/1953	1959/1960	1960/1961
GLASGOW				
Campbeltown	Out	20,554	8,919	10,964
	In	18,558	3,762	3,167
Islay	Out	51,433	87,779	97,571
	In	7,836	11,399	11,173
Tiree	Out	4,566	5,621	8,273
	In	4,480	3,166	3,196
Barra	Out	6,157	12,959	16,110
	In	1,523	1,794	1,726
Benbecula	Out	31,187	87,452	89,085
	In	9,530	11,690	12,055
Stornoway	Out	72,927	189,698	233,329
	In	13,142	20,049	23,652
Inverness	Out	1,109	28,777	39,671
	In	165	22,810	26,780
Wick	Out	1,490	57,656	51,513
	In	174	13,006	11,023
Orkney	Out	5,951	37,138	45,514
	In	1,857	16,943	11,067
Shetland	Out	2,966	45,157	38,588
	In	921	21,675	17,356
ABERDEEN				
Wick	Out	6,014	2,656	3,626
	In	11,951	989	1,899
Orkney	Out	95,135	134,705	143,998
	In	42,361	5,557	5,914
Shetland	Out	89,366	116,162	126,139
	In	28,763	5,711	6,831

APPENDIX VII (Contd.)

B—Freight, Mail and Newspaper Traffic (Contd.)

		1952/1953	1959/1960	1960/1961
EDINBURGH				
Wick	Out	—	382	534
	In	71	189	193
Orkney	Out	577	1,166	908
	In	195	405	353
Shetland	Out	—	607	498
	In	76	396	287
INVERNESS				
Benbecula	Out	1,912	45,530	15,178
	In	260	703	988
Stornoway	Out	4,774	13,601	41,263
	In	407	3,156	3,620
Wick	Out	22,365	35,670	43,808
	In	892	6,309	9,330
Orkney	Out	37,558	36,029	38,740
	In	2,661	11,172	16,664
Shetland	Out	1,680	6,664	10,840
	In	256	7,960	12,024

APPENDIX VIII

EXTRACT FROM THE MINISTRY OF TRANSPORT'S ANNUAL PUBLISHED CENSUS OF ROAD MOTOR VEHICLES

*Vehicles with licences current at any time during the quarter
ended 30th September*

County Council	1955			1960		
	Goods Vehicles		Cars etc.	Goods Vehicles		Cars etc.
	Farmer's	General		Farmer's	General	
Argyll	168	1,112	4,115	173	1,252	6,157
Caithness	76	511	1,874	43	486	3,638
Inverness	131	1,982	5,269	121	2,234	8,387
Orkney	44	640	1,971	28	827	2,841
Ross and Cromarty	113	1,585	3,473	124	1,873	5,286
Sutherland	34	432	1,243	45	509	1,696
Zetland	60	375	857	31	326	1,540
TOTALS	626	6,637	18,802	565	7,507	29,545



MINISTRY OF TRANSPORT

Transport Services in the Highlands and Islands

Report of the Highland Transport Enquiry to the
Minister of Transport, the Secretary of State for Scotland and
the Minister of Aviation.

LONDON

HER MAJESTY'S STATIONERY OFFICE

1963

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